

AD-A108 707

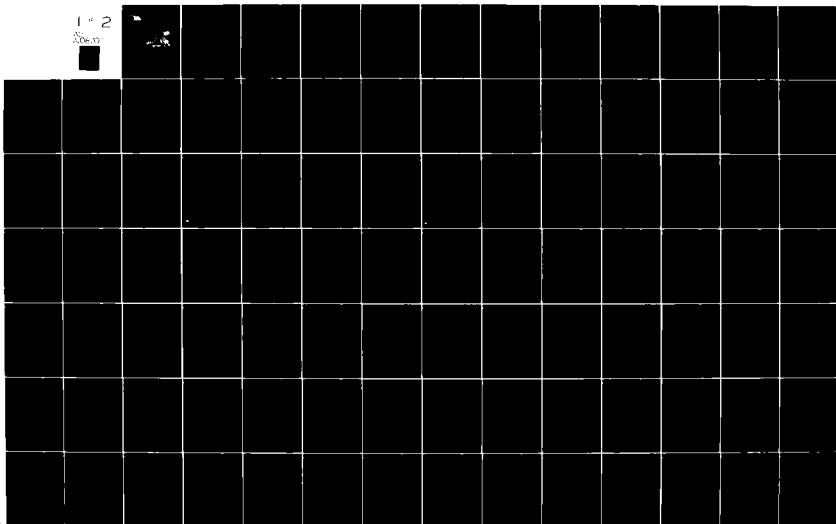
AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX F/G 5/1
GROUND RADIO COMMUNICATION SPECIALTY, AFSC 304X4.(U)
NOV 81

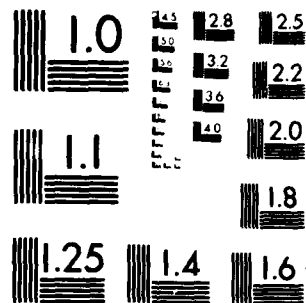
UNCLASSIFIED

NL

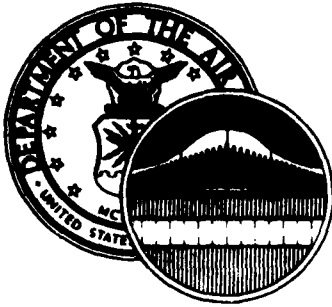
1 2

AD-A108 707





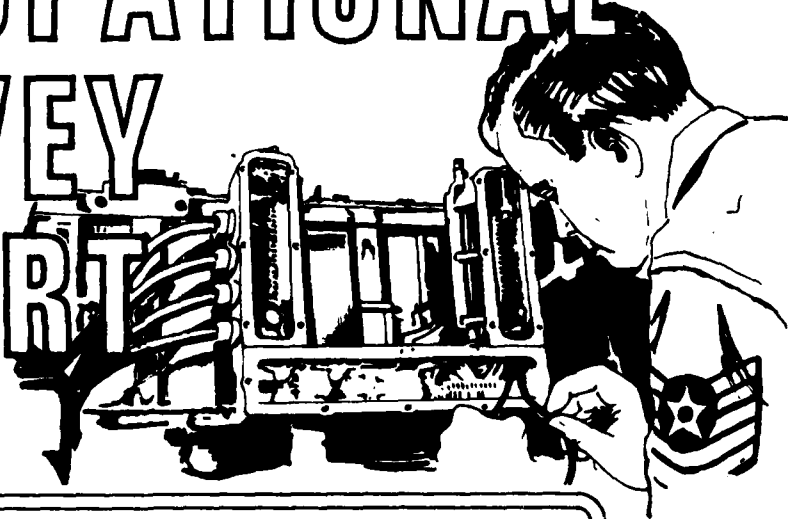
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A



UNITED STATES AIR FORCE

AD A108707

OCCUPATIONAL SURVEY REPORT



GROUND RADIO COMMUNICATION SPECIALTY

AFSC 304X4

AFPT 90-304-422

VOL III OF IV

NOVEMBER 1981

DTIC FILE COPY

DTIC
ELECTE

DEC 17 1981

OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

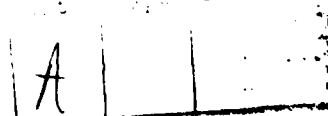
81 12 17 017

DISTRIBUTION FOR 304X4 OSRs AND TRAINING EXTRACTS

<u>ORGANIZATION</u>	<u>OSR</u>	<u>TNG EXTRACT</u>
AFMPC/MPCRPO	2	
DEFENSIVE TECHNICAL INFORMATION CENTER	2	
AFHRL/MODS	2	1
AFMEA/MEMD	1	1
HQ USAF/MPPT	1	1
AFHRL/LRT	1	
KTTC	6	9
EXTENSION COURSE INSTITUTE (ECI/EDV)	2	
ARMY OCCUPATIONAL SURVEY BRANCH	1	
CCAF/AYX	1	
AFMPC/MPCHS	1	
HQ AFISC/IGAP	1	
HQ ATC/TTQ	2	1
NODAC	1	
HQ USMC/OMU	1	
AFCC/TT	2	2
HQ AFCC/MPXT	3	3
HQ ESC/DPTE	3	3
HQ MAC/DPAT	3	3
HQ TAC/DPAT	3	3
HQ ESC/DPTATC	1	1
HQ TAC/DPLATC	1	1
OL-B, 3300 TECH TNG ADVISOR (AFCC & MAC)	1	1

TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE -----	iii
SUMMARY OF RESULTS -----	iv
INTRODUCTION -----	1
SURVEY METHODOLOGY -----	2
CAREER LADDER STRUCTURE -----	6
ANALYSIS OF DAFSC GROUPS -----	29
ANALYSIS OF EXPERIENCE (TAFMS) GROUPS -----	38
COMPARISON OF SURVEY DATA TO AFR 39-1 SPECIALTY DESCRIPTIONS -----	46
ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS -----	46
ANALYSIS OF MAJOR COMMAND DIFFERENCES -----	49
TRAINING ANALYSIS -----	56
ANALYSIS OF WRITE-IN COMMENTS -----	62
COMPARISON TO PREVIOUS SURVEY -----	64
IMPLICATIONS -----	68
APPENDIX A -----	69
APPENDIX B -----	70



PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Ground Radio Communications Specialty (AFS 304X4). The report was prepared for AFMPC/MPCRPO in response to their request for occupational data on the tasks and jobs performed by 304X0, 304X4, and 304X6 personnel, with primary emphasis on the possible merger of the three career ladders. Authority for conducting surveys is contained in AFR 35-2. Computer outputs from which this report was produced are available for use by operating and training officials.

The Air Force occupational survey program has been in existence since 1956 when initial research was undertaken by AFHRL (Air Force Systems Command) to develop a methodology for gathering and analyzing occupational information. In 1967, an operational occupational survey program was established within the Air Training Command and surveys were produced annually for 12 enlisted specialties. In 1972, the program was expanded to conduct occupational surveys covering 51 career fields annually. In late 1975, the program was again expanded to include the survey of officer utilization fields, to permit special management applications projects, and to support inter-service or joint service occupational analysis.

The survey instrument used in the present project was developed by First Lieutenant Julia Hoskins, Inventory Development Specialist. First Lieutenant Gordon Curphy analyzed the survey data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78150.

Copies of this report were distributed to the organizations listed on the preceding page. Copies are available to other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention to the Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150.

This report has been reviewed and is approved.

PAUL T. RINGENBACH, Col, USAF
Commander
USAF Occupational Measurement
Center

WALTER E. DRISKILL, Ph.D.
Chief, Occupational Analysis Branch
USAF Occupational Measurement
Center

SUMMARY OF RESULTS

1. Survey Coverage: Inventory booklets were administered to Ground Radio Communications (AFS 304X4) personnel worldwide. Survey results are based on the responses of 1,618 AFS 304X4 incumbents (38 percent of assigned). A majority of the incumbents surveyed were assigned to AFCC, ESC, or TAC.
2. Career Ladder Structure: DAFSC 304X4 personnel were found to be performing 22 different types of jobs. The personnel in 10 of these major job groups (comprising a majority of the sample) are performing a technical job involving some aspect of ground radio equipment maintenance or installation. The types of jobs performed by these personnel involve maintaining air traffic control equipment, mobile communications equipment, GIANT TALK equipment, missile equipment, or the installation of this equipment. The personnel in the remaining 12 major job groups perform a nontechnical job involving administration, supervision, or training. Examples of some of these types of jobs include personnel performing job control, quality control, or resident training functions.
3. Career Ladder Progression: Three-skill level personnel are maintenance oriented, and spend a majority of their job time maintaining receivers or transmitters or performing general maintenance functions. DAFSC 30454 personnel are also maintenance oriented, but seem to spend about 15 percent of their job time on supervisory functions. DAFSC 30474 personnel appear to be firstline supervisors, with these respondents roughly dividing their time between maintenance and supervisory duties.
4. TAFMS Groups: The trend of an increasing percentage of time spent on supervisory functions with increasing months TAFMS is typical. A review of job satisfaction data reveals 304X4 first-term (1-48 months TAFMS), second-term (49-96 months TAFMS), and career (97+ months TAFMS) personnel are generally somewhat more satisfied than their counterparts in other related career ladders. In addition, a review of the equipment maintained or test equipment utilized reveals higher percentages of first-termers maintain the most common types of ground radio equipment than second-term or career personnel.
5. Analysis of CONUS Versus Overseas Groups: Overall, the jobs and tasks performed by these two DAFSC groups 30454 were similar. A higher percentage of overseas personnel were identified as performing maintenance on tube type equipment.
6. Major Command Comparison: ATC personnel are responsible for various aspects of resident technical school training. TAC personnel are primarily responsible for maintaining the ground radios associated with tactical communications units or Combat Communications Groups. ESC personnel maintain different types of receivers than other MAJCOM personnel. AFCC personnel were differentiated by the Air Traffic Control tasks they performed. MAC personnel were differentiated by the intercom and recorder maintenance tasks they performed.

7. Training Analysis: The 3-, 5-, and 7-skill level AFR 39-1 Specialty Descriptions were found to provide a clear overview of the 304X4 career ladder. The STS, dated August 1979, appears to provide a comprehensive overview of the training requirements for the 304X4 specialty.

8. Implications: It appears that 304X4 first-termers are responsible for more of the total 304X4 maintenance workload than ever before. Thus, resident technical training and OJT personnel need to be aware of this trend and make necessary adjustments. In addition, trainers and managers should look at the feasibility of creating separate AFSCs for job control and E&I personnel in the 30XXX career field.

OCCUPATIONAL SURVEY REPORT
GROUND RADIO COMMUNICATIONS SPECIALTY
(AFS 304X4)

INTRODUCTION

This is a report of an occupational survey of the Ground Radio Communications (AFS 304X4) specialty, completed by the Occupational Analysis Branch, USAF Occupational Measurement Center, in September 1981. The survey was initiated at the request of AFMPC/MPCRPQ in order to determine the feasibility of merging three radio maintenance specialties (AFSs 304X0, 304X4, and 304X6) into a common specialty. In order to properly address this issue, personnel in all three specialties were surveyed using a common job inventory. The feasibility of merging the three specialties and other types of analyses across the three career ladders are presented in a combined report (AFPT 90-304-422, Volume I). This report concentrates primarily on the results relating to the Ground Radio Communications (AFS 304X4) specialty. Detailed results of the Wideband Communications Equipment (AFS 304X0) and Space Communications Systems Equipment (AFS 304X6) specialties are provided in two separate reports (AFPT 90-304-422, Volumes II and IV).

Background

As outlined in the current AFR 39-1 Specialty Descriptions, Ground Radio Communications personnel are responsible for installing or maintaining transmitters, receivers, transceivers, and related equipment, including AM, FM, SSB and ISB applicable to point-to-point, ground-to-air, facsimile, LF, HF, VHF and UHF systems, recorders, display equipment and base radio systems. These incumbents are assigned primarily to Communications Squadrons or Groups, Technical Control Squadrons, or Combat Communications Groups, with 304X4 incumbents responsible for maintaining the LF, HF, VHF, or UHF type systems associated with these organizations.

Historically, the 304X4 specialty has gone through many title and DAFSC designation changes over the years. The 304X4 career ladder had its beginning in 1954 with two AFSCs, the 304X2 for light radio equipment and the 304X3 for heavy radio equipment. In May 1955, both ladders were shredded in order to permit specialization around certain pieces of light and heavy radio equipment. The shreds were deleted in February 1959 and the two career ladders were then merged in 1963. Other than some minor title changes, the ladder has remained virtually unchanged since that time.

Formal training for personnel entering the 304X4 specialty is available at Keesler Technical Training Center. This is a 115 day course in which future Ground Radio Communications personnel receive orientation in the areas of electronic principles, test equipment, VHF transceivers, UHF transceivers, communications consoles, and control tower communications systems. Approximately 1,300 personnel graduate from this course each year, and upon completion graduates are awarded a 3-skill level and are assigned to various units worldwide.

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

Objectives

This report will examine the Ground Radio Communications specialty (AFS 304X4) on the basis of the tasks performed by the survey respondents. The survey instrument used for this report was a combined 304X0, 304X4, and 304X6 and results of the 304X0, 304X6, and joint 304X0, 304X4 and 304X6 analyses are in three separate reports (AFPT 90-304-422 Volumes I, II, and IV). Users of this report should examine the other three reports also in order to better assess the 304X4 specialty. Topics discussed in this report include: (1) development and administration of the survey instrument; (2) the jobs performed by 304X4 personnel; (3) CONUS versus overseas differences; (4) comparisons of the job structure to current AFR 39-1 Specialty Descriptions and the Specialty Training Standard (STS); and (5) job satisfaction and other related background data.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-304-422. As a starting point, the tasks listed in the 1975 304X0, the 1976 304X4, and the 1976 304X6 job inventories were reviewed for currency by the Inventory Development Specialist and Instructors from each specialty at the Keesler Technical Training Center. They then reviewed all pertinent career ladder publications and directives for additional radio related tasks. This tentative task list was then reviewed for completeness and accuracy by 304X0, 304X4, and 304X6 personnel at Andrews AFB MD, Tinker AFB OK, Robins AFB GA, and Offutt AFB NE. The resulting task list was reviewed again by Keesler Technical Training Instructors from all three AFSCs who sat in a face-to-face encounter to insure the tasks were representative of the jobs performed by 304X0, 304X4, and 304X6 personnel. This encounter helped to insure that the skills and knowledges needed to perform a task were the same, regardless of the equipment associated with the task. For example, wiring diagrams of VHF radio equipment using amplifiers were presented during the encounter, and the Training Instructors debated on whether the skills and knowledges needed to isolate malfunctions on one type of equipment was essentially the same as the other types of equipment. If the skills and knowledges were similar, then only one task was written, such as "isolate AM receiver malfunctions". If the skills and knowledges differed to some degree, then a number of more equipment specific tasks were written, such as "isolate malfunctions in GIANT TALK control consoles." Another example of this type of commonality discussion centered around components of various systems. In this study there was a consensus that most components removed and replaced required the same skill no matter what system they were located in. For example, the task "adjust limiter components" indicates that the skill is the same no matter what equipment it is located in.

This process resulted in a final job inventory of 863 tasks grouped under 23 duty headings. In addition, a background section was included which asked for information about each respondent, such as grade, Total Active Federal Military Service (TAFMS), duty title, job interest, and the type of radio system maintained or operated.

Job Inventory Administration

During the period October 1980 through February 1981, Consolidated Base Personnel Offices in operational units worldwide administered the inventory to all job incumbents holding a DAFSC of 304X0, 304X4, or 304X6. These job incumbents were identified using AFMPC personnel data tapes available through the Air Force Human Resources Laboratory (AFHRL).

Each individual who filled out an inventory first completed an identification and biographical information section and then checked each task performed in their current job. After checking all tasks performed, each member then rated each of these tasks on a nine-point scale showing relative time spent on the task as compared to all other tasks checked. The ratings ranged from one (very small amount of time spent) through five (about average time spent) to nine (very large amount time spent).

To determine relative time spent for each tasks checked by a respondent, all of an incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task is then divided by the total task ratings and multiplied by 100. This procedure provides a basis for comparing tasks in terms of both percent members performing and relative percent time spent.

Task Factor Administration

In addition to completing the job inventory, selected senior 304X4 personnel were also asked to complete a second booklet for task difficulty. The task difficulty rating booklets are processed separately from the job inventories. This information is used in a number of different analyses discussed in more detail within the report.

Task Difficulty. We asked each senior NCO completing a task difficulty booklet to rate all of the tasks on a nine-point scale from extremely low to extremely high as to the relative difficulty of that task. Difficulty is defined as the length of time it requires an average member to learn to do that task. Task difficulty data was independently solicited from experienced 7- or 9-skill level personnel stationed worldwide in each specialty. The interrater reliability (as assessed through components of variance of standard group means) for the 50 DAFSC 304X4 raters who returned booklets was .94 which suggests very high agreement. Ratings were then adjusted so that tasks of average difficulty have ratings of 5.0. The resulting data is a rank ordering of tasks indicating a degree of difficulty for each task in the inventory.

Job Difficulty Index. After computing the task difficulty index for each item, it is then possible to compute a Job Difficulty Index (JDI) for the job groups identified in the survey analysis. This index provides a relative measure of which jobs, when compared to other jobs identified, are more or less difficult. An equation using the number of tasks performed and the average difficulty per unit time spent as variables are the basis for the JDI. This index ranges from one for very easy jobs to 25 for very difficult jobs. The data are adjusted so that the average job difficulty index is 13.00. Thus, the more time a group spends performing difficult tasks, and the more

tasks they perform, the higher will be their job difficulty index. The JDI ratings for the 304X4 career ladder can be found in the CAREER LADDER STRUCTURE section of this report.

When used in conjunction with other factors, such as percent members performing, the task difficulty ratings can provide insight into the training requirements of the specialty. This may help validate the lengthening or shortening of specific units of instruction to refine various training programs.

Survey Sample

Personnel were selected to participate in this survey so as to insure an accurate representation across all career ladders, MAJCOMs, and paygrade groups. In this study, fifty percent of the incumbents with a 304X4 DAFSC who were available for sampling were solicited for their responses. Table 1 reflects both the percentage of personnel in the sample as well as the major command distribution of personnel assigned to the 304X4 career ladder as of the Spring 1981. Table 2 reflects the percentage distribution by paygrade for the 304X4 ladder. Table 3 reflects the distribution of the survey sample in terms of TAFMS groups. Overall, a representative sample was obtained, with 1,618 of the 4,286 respondents (38 percent) assigned to the 304X4 career ladder sampled.

Data Processing and Analysis

Once job inventories are returned from the field, they are prepared so that task responses and background information can be optically scanned. Other biographical information (such as name, base, autovon extension) is keypunched onto disks and entered directly into the computer. Once both sets of data are in the computer, they are merged to form a complete case record for each respondent. Computer generated programs using Comprehensive Occupational Data Analysis Programs (CODAP) techniques were then applied to the data.

CODAP produces job descriptions for respondents based on their responses to specific inventory tasks. Computer generated job descriptions are available for DAFSC groups, TAFMS groups, and MAJCOM groups, and include such information as percent members performing each task, the average percent time spent performing each task, the percent members utilizing various pieces of equipment, and the cumulative average percent time spent by all members for each task in the inventory.

TABLE 1
COMMAND DISTRIBUTION OF SURVEY SAMPLE

<u>MAJOR COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AFCC	63	67
ESC	10	7
TAC	9	9
ATC	4	4
MAC	2	3
USAFE	-	4
OTHER	<u>12</u>	<u>6</u>
TOTAL	100	100

TOTAL 304X4 ASSIGNED: 4,286
TOTAL 304X4 SURVEYED: 1,618
PERCENT OF ASSIGNED SAMPLED: 38%

TABLE 2
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AIRMAN	23	23
E-4	26	25
E-5	26	28
E-6	15	15
E-7	<u>10</u>	<u>9</u>
TOTAL	100	100

TABLE 3
TAFMS DISTRIBUTION OF SURVEY SAMPLE

	<u>MONTHS TAFMS</u>			<u>TOTAL</u>
	<u>1-48</u>	<u>49-96</u>	<u>97+</u>	
NUMBER IN SAMPLE	605	354	656	1,618
PERCENT OF 304X4 SAMPLE	38%	22%	40%	100%

CAREER LADDER STRUCTURE

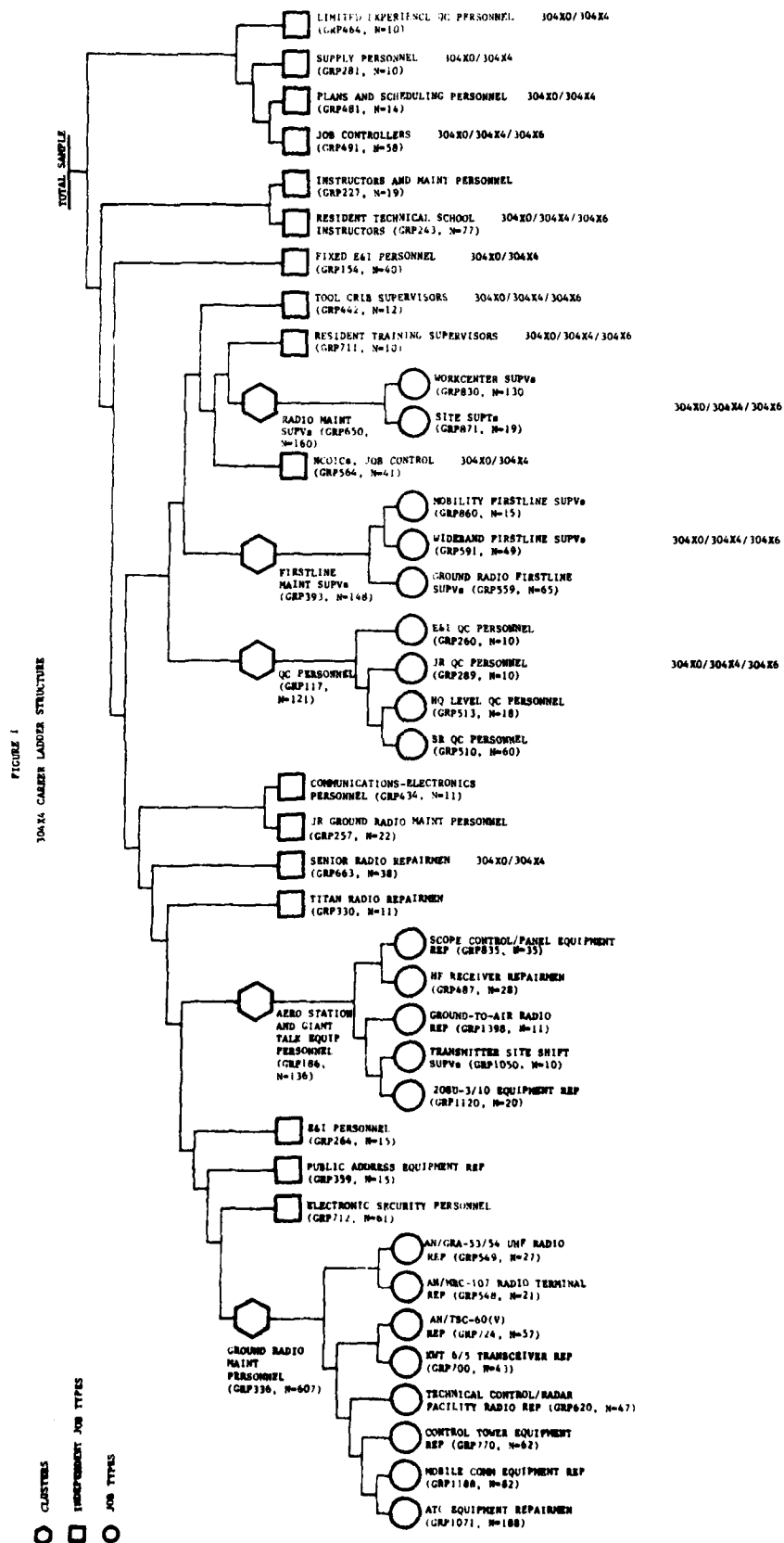
Many times an in-depth description of the different kinds of work accomplished by the personnel in a particular specialty may be needed. Although the AFR 39-1 Specialty Descriptions and the 304X4 Specialty Training Standard (STS) provide a general overview of the type of work performed and equipment maintained, many times management and training personnel need more specific data for making specialty related decisions. By describing the different types of jobs performed and the types of equipment maintained or operated by the personnel performing these various jobs, management possesses a much more powerful tool for decision-making.

The analysis performed in this section is designed to describe the major types of jobs performed by personnel in the 304X4 specialty, such as job control, ground radio maintenance, and technical training. This analysis is based primarily upon the tasks performed and the time spent ratings provided by 304X4 respondents, rather than on specialty or other background factors.

For the purpose of organizing individual jobs into similar units of work, an automated job clustering program is used. This hierarchical grouping program is a basic part of the Comprehensive Occupational Data Analysis Program (CODAP) system for job analysis. Each individual job description in the sample is compared to every other job description in terms of tasks performed and the relative amount of time spent on each task in the job inventory. The automated system is designed to locate the two job descriptions with the most similar tasks and percent time ratings and combine them to form a composite job description. In successive stages, new members are added to initial groups or new groups are formed based on the similarity of tasks and percent of time ratings in each individual job description. This procedure is continued until all individuals and groups are combined to form a single composite representing the total sample. The resulting analysis of the variety of groups of jobs serves to identify: (1) the number and characteristics of the different jobs which exist within the career ladders; (2) the tasks which tend to be performed together by the same respondents; and (3) the breadth or narrowness of the jobs which exist within the Ground Radio Communications career ladder.

The basic identifying group used in the hierarchical job structuring process is the Job Type. A job type is a group of individuals who perform many of the same tasks and spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as Clusters. In many career fields, there are specialized job types that are too dissimilar to be grouped into any cluster. These unique groups are labeled Independent Job Types.

The jobs performed by Ground Radio Communications career ladder incumbents are illustrated in Figure 1. Based on the similarity of tasks performed and the amount of time spent performing each task, five clusters and 17 independent job types were identified. These clusters and independent job types are on the following pages:



- I. GROUND RADIO MAINTENANCE PERSONNEL (GRP336, N=607)
 - a. Air Traffic Control Equipment Repairmen (GRP1071, N=188)
 - b. Mobile Communications Equipment Repairmen (GRP1188, N=82)
 - c. Control Tower Equipment Repairmen (GRP770, N=62)
 - d. Technical Control/Radar Facility Radio Repairmen (GRP620, N=47)
 - e. KWT-6/5 Transceiver Repairmen (GRP700, N=43)
 - f. AN/TSC-60(V) Communications Central Repairmen (GRP724, N=57)
 - g. AN/MRC-107 Radio Communications Terminal Repairmen (GRP548, N=21)
 - h. AN/GRA-53/54 UHF Radio Repairmen (GRP549, N=27)
- II. ELECTRONIC SECURITY PERSONNEL (GRP712, N=61)
- III. PUBLIC ADDRESS EQUIPMENT REPAIRMEN (GRP359, N=15)
- IV. ENGINEERING AND INSTALLATION (E&I) PERSONNEL (GRP264, N=15)
- V. AERONAUTICAL STATION AND GIANT TALK EQUIPMENT PERSONNEL (GRP186, N=136)
 - a. 208U-3/10 Equipment Repairmen (GRP1120, N=20)
 - b. Transmitter Site Shift Supervisors (GRP1050, N=10)
 - c. Ground-to-Air Radio Repairmen (GRP1398, N=11)
 - d. HF Receiver Repairmen (GRP487, N=28)
 - e. SCOPE CONTROL/PANEL Equipment Repairmen (GRP835, N=35)
- VI. TITAN RADIO REPAIRMEN (GRP330, N=11)
- VII. SENIOR RADIO REPAIRMEN (GRP663, N=38) 304X0/4
- VIII. JUNIOR GROUND RADIO MAINTENANCE PERSONNEL (GRP257, N=22)
- IX. COMMUNICATIONS-ELECTRONICS PERSONNEL (GRP434, N=11)
- X. QUALITY CONTROL PERSONNEL (GRP117, N=121) 304X0/4/6
 - a. Senior Quality Control Personnel (GRP510, N=60)
 - b. HQ Level Quality Control Personnel, (GRP513, N=18)
 - c. Junior Quality Control Personnel (GRP289, N=10)
 - d. E&I Quality Control Personnel (GRP260, N=10)
- XI. FIRSTLINE MAINTENANCE SUPERVISORS (GRP393, N=148) 304X0/4/6
 - a. Ground Radio Firstline Supervisors (GRP559, N=65)
 - b. Wideband Firstline Supervisors (GRP591, N=49)
 - c. Mobility Firstline Supervisors (GRP860, N=15)
- XII. NCOICs, JOB CONTROL (GRP564, N=41) 304X0/4
- XIII. RADIO MAINTENANCE SUPERVISORS (GRP650, N=160) 304X0/4/6
 - a. Site Superintendents (GRP871, N=19)
 - b. Workcenter Supervisors (GRP830, N=130)

XIV.	RESIDENT TRAINING SUPERVISORS (GRP711, N=10)	304X0/4/6
XV.	TOOL CRIB SUPERVISORS (GRP412, N=12)	304X0/4/6
XVI.	FIXED ENGINEERING AND INSTALLATION (E&I) PERSONNEL (GRP154, N=40)	304X0/4
XVII.	RESIDENT TECHNICAL SCHOOL INSTRUCTORS (GRP243, N=77)	304X0/4/6
XVIII.	INSTRUCTORS AND MAINTENANCE PERSONNEL (GRP227, N=19)	304X0/4/6
XIX.	JOB CONTROLLERS (GRP491, N=58)	304X0/4/6
XX.	PLANS AND SCHEDULING PERSONNEL (GRP481, N=14)	304X0/4
XXI.	SUPPLY PERSONNEL (GRP281, N=10)	304X0/4
XXII.	LIMITED EXPERIENCE QUALITY CONTROL PERSONNEL (GRP464, N=10)	304X0/4

The DAFSC 304X4 respondents forming these job types and clusters account for 79 percent of the 304X4 survey sample. The remaining 21 percent did not group with any of the clusters or job types described above. Some of the titles held by the remaining 21 percent include: Ground Radio Equipment Repairman, NCOIC, COMSEC Maintenance, SIP Training Instructors, Job Controller, VIP Maintenance, and Installation Team Member. These personnel did not group with any cluster or job type because of either the unique job they perform or in the manner in which they perceive their job.

Overview

Generally, the career ladder is fairly heterogeneous, with a wide variety of radio maintenance, administrative, training, and supervisory jobs being performed by 304X4 personnel. These jobs can be divided roughly into two general functional areas. The first functional area includes all those 304X4 personnel who perform the various technical aspects of ground radio communication equipment maintenance. This functional area includes ten major job groups and makes up a majority of the 304X4 personnel sampled. Some of the major job groups found in this functional area include: Ground Radio Maintenance Personnel, Electronic Security Personnel, E & I Personnel, and Titan Radio Repairmen. The key differentiating factors for these major job groups seem to be the ground radio mission performed, equipment maintained, and the average number of tasks performed.

The second functional area includes the remaining twelve major job groups, in which most of these incumbents spend a majority of their job time on various aspects of ground radio training, supervision, or administrative type duties rather than on ground radio maintenance or installation. Since most of these incumbents do not perform "hands-on" ground radio maintenance, the key differentiating factor for the personnel in these 12 major job groups is the differing amounts of time spent performing either supervisory, administrative, or training related tasks. In addition, most of the major job groups in this functional area are also comprised of substantial percentages of both DAFSC 304X0 and 304X6 personnel.

The data analyzed for this section are reported in two different ways. A brief narrative description of each cluster and independent job type is presented below. This narrative description is designed to give an overview for each of the major job groups identified. In addition to the overview, there are three types of tables at the end of this section which also provide pertinent data for each major job group. These tables can be particularly useful for gathering more in-depth information or for making quick comparisons between major job groups.

As stated earlier, there are three types of tables at the end of this section which provide information about each of the clusters and independent job types. These tables can help to identify differences in the types of work performed, equipment maintained, job satisfaction, and DAFSC distribution for each major job group. Tables 4, 5 and 6 provide the relative percent time spent on duties, and can help to identify the maintenance, supervisory, and other functions that different groups concentrate on performing. For example, when comparing Electronic Security Personnel with Titan Radio Repairmen, Table 4 reveals that Electronic Security Personnel spend 26 percent of their job time maintaining receivers, while Titan Radio Repairmen spend only half as much time performing the same duty. Tables 7, 8, and 9 provide selected background information, and can reveal equipment differences, TAFMS differences, and paygrade differences between major job groups. For example, Table 8 reveals a very low percentage of QC Personnel reporting maintaining any type of ground radio equipment, while somewhat higher percentages of Firstline Maintenance Supervisors report maintaining such equipment as the KWM-2/2A, AN/GRC-171, and AN/GRT-21. Finally, Tables 10, 11, and 12 reveal job satisfaction differences for the personnel in the major job groups, and can be particularly useful in pointing out which types of jobs may have potential morale problems. An examination of these last three tables reveals that Junior Ground Radio Maintenance Personnel, Communications-Electronics Personnel, NCOICs, Job Control, Fixed E & I Personnel, Job Controllers, and Supply Personnel have somewhat lower job satisfaction indicators than the other major job groups identified.

Also included in this report are two appendices concerning the Ground Radio Communications career ladder structure. Appendix A yields various duty, background, and job satisfaction information about the job types identified within each of the clusters reported in this section, as well as providing a brief narrative description for the job types identified. Appendix B lists common tasks performed by the personnel in each major job group, and when used in conjunction with the data presented in this section, they can provide additional insight about the type of work personnel in a particular job perform.

I. GROUND RADIO MAINTENANCE PERSONNEL (GRP336). This cluster of 607 respondents is the largest in the sample, with approximately 68 percent of these personnel holding DAFSC 30454. These incumbents are responsible for maintaining both fixed and transportable transmitters, receivers, point-to-point, ground-to-air LF, HR, VHF, and UHF systems. Some of the typical equipment these incumbents maintain include the AN/GRC-171, AN/GRC-175, and AN/GRR-24, which are often used for air traffic control at various air bases. Typical tasks performed by these 304X4 personnel include:

- isolate malfunctions in UHF power amplifiers
- perform PMIs on AM receivers
- perform PMIs on AM UHF transmitters or exciters
- adjust automatic gain control (AGC) components
- align transceivers

These incumbents perform a fairly high number of tasks (125) and perform a job above average in difficulty (JDI equals 16.4, see the INTRODUCTION for an explanation of the JDI). These incumbents appear to be fairly satisfied with their job, with 75 percent finding their job interesting and 87 percent perceiving their training is utilized at least fairly well.

II. ELECTRONIC SECURITY PERSONNEL (GRP712). These 61 personnel are all Electronic Security Command resources who are primarily responsible for maintaining the AN/FLR-9. This radio system is primarily used to monitor communications and to determine that communications' origin. All of the DAFSC 304X4 personnel performing this job hold either the 5- or 7-skill level, and typical tasks performed by these incumbents include:

- align AM receivers
- perform PMIs on recorders or reproducers
- adjust audio amplifier components
- secure classified materials
- remove or replace electronic subassemblies

As expected, a majority of these respondents are located overseas (95 percent) and are fairly senior (only 16 percent in their first enlistment). These incumbents are somewhat less satisfied than the above major job group, with only 64 percent finding their job interesting and 45 percent planning to reenlist.

III. PUBLIC ADDRESS EQUIPMENT REPAIRMEN (GRP359). These 15 personnel maintain many of the same types of air traffic control equipment as Ground Radio Maintenance Personnel, such as the AN/GRC-171, AN/GRC-175, and AN/GRR-24. These incumbents, however, seem to concentrate more on maintaining the recording and reproducing equipment associated with these systems and maintaining public address systems than the above major job group. Representative tasks performed by these incumbents include:

- perform PMIs on recorders or reproducers
- isolate malfunctions in recorders or reproducers
- adjust squelch circuit components
- set up or remove public address systems
- adjust public address system components

These incumbents are junior, with 40 percent holding the 3-skill level and 80 percent are in their first enlistment. These incumbents are among the most satisfied of all major job groups, with 80 percent finding their job interesting and 100 percent perceiving their training is being utilized at least fairly well.

IV. ENGINEERING AND INSTALLATION (E&I) PERSONNEL (GRP264). Rather than maintaining radio or associated equipment, these 15 DAFSC 304X4 respondents are responsible for the installation of electronic equipment worldwide. Somewhat unexpectedly, these incumbents appear to be fairly junior, with 40 percent holding the 3-skill level and 67 percent still in their first enlistment. Typical tasks performed by these incumbents are installation or operationally oriented, and include:

- crate or uncrate components or modules
- splice wiring or cables
- perform system modifications
- install or remove mounting equipment
- perform preoperational checks of equipment

Since these incumbents are primarily installing equipment, fairly low percentages of these respondents report maintaining any type of equipment. E & I Personnel seem to be fairly satisfied with their job, with 93 percent finding their job interesting and 73 percent perceiving their talents are utilized fairly well or better.

V. AERONAUTICAL STATION AND GIANT TALK EQUIPMENT PERSONNEL (GRP186). These 136 304X4 incumbents maintain the ground-to-air radios and associated radio equipment found at aeronautical stations and GIANT TALK facilities, such as the 208U-3, 208U-10, or R-390A. Many of the tasks these incumbents perform involve maintaining universal radio group (URG), frequency shift keying (FSK), or allotter components, such as:

- isolate malfunctions in allotter presets
- adjust URG status display readout components
- adjust URG data bypass equipment components
- adjust frequency shift keying (FSK) telephone components
- adjust line amplifier components

The personnel maintaining aeronautical station and GIANT TALK equipment seem to be fairly senior (averaging 79 month TAFMS) and 55 percent are located at overseas locations. These incumbents perform a fairly difficult job (JDI equals 15.9), and appear to be fairly satisfied with their job, with 85 percent perceiving their talents are utilized at least fairly well and 53 percent plan to reenlist.

VI. TITAN RADIO REPAIRMEN (GRP330). These 11 DAFSC 304X4 incumbents are located at the three primary Titan missile locations and are responsible for maintaining the AN/GRC-117 radio system used in the missile complexes. The AN/GRC-117 is a hardened, survivable communications system which provides simultaneous voice and digital communications prior to and following an atomic attack. These incumbents are fairly junior, averaging only 37 months TAFMS and 73 percent are in their first enlistment. Typical tasks performed by these personnel while maintaining the AN/GRC-117 include:

- adjust driver, intermediate power, or transmit facility link amplifier components
- perform PMIs on FM UHF transmitters, exciters, or up converters
- adjust automatic fault sensing and switching network components
- isolate malfunctions in FM tube type UHF transmitters or exciters

It is interesting to note that these incumbents are among the most satisfied of all major job groups. Eighty-two percent of these incumbents find their job interesting, 100 percent perceive their job utilizes their talents and training at least fairly well, and 64 percent plan to reenlist.

VII. SENIOR RADIO REPAIRMEN (GRP663). This independent job type of 38 personnel is the only maintenance oriented major job group with substantial percentages of personnel from more than one specialty. While most of these incumbents hold DAFSC 304X0 (79 percent), 21 percent also hold DAFSC 304X4. The most distinguishing aspect of the job these respondents perform concerns the average number of tasks these incumbents perform (275), which is the highest average of all major job groups. These incumbents also perform the most difficult job, having a JDI of 25. Typical tasks performed by these incumbents include:

- adjust high voltage power supply components
- adjust audio amplifier components
- align FM receivers
- adjust sideband demodulator or balanced mixer components
- adjust local oscillator components

These respondents maintain a large variety of radio equipment, (which is probably due to the fact that both the 304X0 and 304X4 specialties are represented in this major job group) some of which include the AN/TRC-97A, AN/FCC-17, AN/UCC-4, and AN/GSS-29. These incumbents are relatively senior (averaging 90 months TAFMS) and 78 percent find their job interesting.

VIII. JUNIOR GROUND RADIO MAINTENANCE PERSONNEL (GRP257). These incumbents perform a job similar to Ground Radio Maintenance Personnel described earlier, but only have half as much time in the service. Perhaps due to this lesser experience, they only perform one-fourth of the tasks of the above mentioned job group. These personnel also maintain the same types of radio equipment as the referred to major job group, such as the AN/GRC-171 and the AN/GRR-24, but the number of different types of equipment maintained is much lower. Interestingly, these incumbents are primarily located at Minuteman or Titan missile bases, and commonly perform such tasks as:

- perform corrosion control
- adjust squelch circuit components
- perform PMIs on AM UHF transmitters or exciters
- align AM receivers
- clean maintenance work areas

These incumbents are also among the most dissatisfied of all major job groups, in which the limited job they perform probably is the main contributing factor. Overall, only 54 percent perceive their training is being utilized at least fairly well and only 32 percent plan to reenlist.

IX. COMMUNICATIONS-ELECTRONICS PERSONNEL (GRP434). These 11 personnel are differentiated from most other major job groups by the fact that they are performing a maintenance oriented job, but maintain very few types of radios or radio equipment. Instead these incumbents maintain recorders,

reproducers, or public address system components, many of which seem to be used in conjunction with various displays at different air force base locations, such as Wright-Patterson AFB OH. Typical tasks performed by these incumbents include:

- isolate malfunctions in recorders or reproducers
- install or remove mounting hardware
- adjust audio amplifier components
- align speaker systems
- run test tapes

All of these personnel hold the 5- or 7-skill level, and only 18 percent are in their first enlistment. Job satisfaction data for these incumbents appears to be about average, with 73 percent perceiving their talents are utilized at least fairly well and 45 percent planning to reenlist.

X. QUALITY CONTROL PERSONNEL (GRP117). This is the first major job group with notable percentages of personnel from all three specialties represented. As the title indicates, the personnel in this cluster are responsible for performing the quality control functions at their assigned locations. Consequently, these incumbents spend very little job time performing radio maintenance or operations, but instead evaluate the various aspects of radio maintenance and operations. The tasks commonly performed by these incumbents are primarily evaluative in nature and include:

- evaluate compliance with performance standards
- evaluate capability of equipment
- evaluate inspection reports or procedures
- schedule inspections
- prepare deficiency reports

Somewhat expectedly, these incumbents are fairly senior, averaging 170 months TAFMS and 73 percent hold the 7-skill level. A review of job satisfaction data for these incumbents reveals 72 percent perceive their job as interesting and 55 percent plan to reenlist.

XI. FIRSTLINE MAINTENANCE SUPERVISORS (GRP393). This cluster of 143 incumbents is also made up of personnel from all three specialties. These personnel appear to be the immediate supervisors at a variety of radio maintenance facilities, and seem to divide their time between supervisory and maintenance functions. Most of these respondents are either senior 5-skill level or 7-skill level personnel who either do not have enough seniority to perform only supervisory functions, or due to manning problems at the site, still must perform maintenance duties to insure optimum mission capability. Many of the tasks these incumbents perform are training related, such as:

- conduct OJT
- maintain training records, charts or graphs
- conduct proficiency training
- establish performance standards for subordinates
- adjust automatic gain control (AGC) components

These personnel supervise an average of four people, and perform a fairly difficult job (JDI equals 18.9). These personnel appear to be fairly happy with their job, with 81 percent perceiving their training is utilized at least fairly well and 61 percent plan to reenlist.

XII. NCOICs, JOB CONTROL (GRP564). While a majority (73 percent) of the 41 respondents in this major job group hold DAFSC 304X4, a substantial percentage of personnel also hold DAFSC 304X0. These senior NCOs do not maintain, operate, or supervise the personnel who perform these functions on various types of radio equipment. Instead, these personnel are the supervisors of job control shops, whose purpose is to coordinate and schedule the various types of radio maintenance activities necessary to insure minimum mission degradation. These incumbents concentrate on either performing supervisory functions, compiling maintenance data, or monitoring maintenance activities, with tasks such as:

- maintain status boards or charts
- compile maintenance data
- coordinate work activities with other units or agencies
- coordinate cannibalization of equipment parts with appropriate agencies
- prepare APRs

being performed by fairly high percentages of these respondents. A review of job satisfaction indicators reveals that these respondents are extremely dissatisfied with their job, with only 34 percent perceiving their training is being utilized at least fairly well and only 38 percent planning to reenlist.

XIII. RADIO MAINTENANCE SUPERVISORS (GRP650). This fairly large cluster of 160 respondents also primarily hold DAFSC 304X4, but a notable percentage of DAFSC 304X6 and 304X0 personnel can also be found in this major job group. These incumbents are the middle level supervisors and managers at various ground radio, radio relay, and satellite communications sites located worldwide. Since these incumbents are middle level supervisors, they spend most of their job time performing supervisory functions and very little time on radio maintenance or operations. Typical tasks performed by these senior NCOs include:

- interpret policies, procedures, or directives for subordinates
- prepare APRs
- determine requirements for space, personnel, equipment or supplies
- schedule leaves or passes
- plan work assignments

As stated earlier, the personnel performing this job are fairly senior, averaging 208 months TAFMS and having an average paygrade of E-6 or E-7. These respondents have somewhat above average job satisfaction indicators, with 80 percent finding their job interesting and 86 percent perceiving their talents are utilized at least fairly well.

XIV. RESIDENT TRAINING SUPERVISORS (GRP711). The ten personnel in this independent job type are among the most senior of all major job groups, averaging 219 months TAFMS and having an average paygrade of E-7. These incumbents are the course supervisors of many of the various

304X0, 304X4, and 304X6 courses taught at Keesler Technical Training Center. In many cases they are also conducting resident course classroom training. Typical tasks performed by these incumbents include:

- evaluate training methods or techniques
- assign resident course instructors
- conduct resident course classroom training
- evaluate progress of students
- schedule leaves or passes

As expected, very few of these incumbents report maintaining any type of radio equipment, but instead supervise the personnel who instruct resident technical school students on the techniques and principles used to maintain various types of radio equipment. Job satisfaction data reveals these incumbents are fairly satisfied with their job, with 80 percent finding their job interesting and 40 percent planning to reenlist.

XV. TOOL CRIB SUPERVISORS (GRP442). Seventy-five percent of the 12 personnel in this independent job type are assigned overseas. These incumbents do not maintain radio equipment, but instead supervise the tool and supply functions at various radio maintenance facilities. Typical tasks performed by these incumbents include:

- prepare requisitions for parts, tools, or supplies
- direct supply functions or tool crib operations
- maintain tool cribs
- research supply catalogs
- maintain historical records

Forty-one percent of these incumbents hold DAFSC 304X0, 34 percent hold DAFSC 304X4, and 17 percent hold DAFSC 304X6. These respondents are fairly senior, averaging 187 months TAFMS and having an average paygrade of E-6. A review of job satisfaction data reveals that while a somewhat lower than average percentage of these incumbents find their job interesting (66 percent), a fairly high percentage of personnel plan to reenlist (75 percent).

XVI. FIXED ENGINEERING AND INSTALLATION (E&I) PERSONNEL (GRP154). The 40 personnel in this independent job type are approximately equally divided between those holding DAFSC 304X0 or DAFSC 304X4. These incumbents do not maintain radio equipment, but instead are responsible for the installation and removal of fixed radio systems. Typical tasks performed by these personnel include:

- install or remove fixed communications equipment
- install or remove mounting hardware
- assemble systems or subsystems from component parts
- install or remove communications or control towers
- lace cable assemblies or internal wiring

These incumbents are fairly junior, averaging only 36 months TAFMS and 80 percent are still in their first enlistment. Unfortunately, the job satisfaction data for these personnel are fairly poor, with only 27 percent perceiving their job utilizes their training at least fairly well, and only 39 percent planning to reenlist.

XVII. RESIDENT TECHNICAL SCHOOL INSTRUCTORS (GRP243). This independent job type of 77 personnel consists of substantial percentages of personnel from all three specialties. These incumbents are primarily stationed at Keesler AFB MS, and are responsible for conducting the various 304X0, 304X4, and 304X6 resident courses located there. Almost all of the tasks these incumbents perform are training related, and include:

- score tests
- conduct resident course classroom training
- counsel trainees on training progress
- conduct remedial training
- procure training aids, space, or equipment

Twenty-two percent are in their first enlistment. An examination of job satisfaction data reveals these incumbents are fairly satisfied, with 76 percent finding their job interesting and 60 percent planning to reenlist.

XVIII. INSTRUCTORS AND MAINTENANCE PERSONNEL (GRP227). This independent job type of 19 personnel is primarily made up of 304X6 instructors, but notable percentages of DAFSC 304X0 and 304X4 personnel are also in this major job group. These incumbents perform a job very similar to Resident Technical School Instructors described earlier, in that both major job groups are responsible for conducting resident course classroom training. However, these incumbents differ from the previous major job group in that they perform approximately three times more tasks, most of which are maintenance oriented. Representative tasks performed by these respondents include:

- conduct remedial training
- evaluate training methods or techniques
- read meters to determine equipment operation or signal quality
- conduct resident course classroom training
- configure patch panels for analog operations

These incumbents are fairly senior, averaging 129 months TAFMS and only 21 percent are in their first enlistment. Overall, this is one of the most satisfied of all major job groups, with 95 percent of these personnel perceiving their job utilizes their talents at least fairly well and 89 percent perceiving their training is being utilized at least fairly well.

XIX. JOB CONTROLLERS (GRP491). This independent job type of 58 personnel performs the lowest average number of tasks of all major job groups (12), most of which involve administrative functions. These incumbents perform the job control functions at various radio sites throughout the world. This job primarily involves monitoring the status of radio equipment and coordinating with the proper maintenance personnel to fix any equipment problems that may occur. Typical tasks performed by these respondents include:

- maintain status boards and charts
- compile maintenance data
- prepare status reports
- determine work priorities
- coordinate work activities with other units or agencies

Fifty percent of these personnel hold DAFSC 304X4, and 37 percent hold DAFSC 304X0. A review of job satisfaction data reveals these incumbents are fairly dissatisfied with their job, with only 21 percent perceiving their training is utilized at least fairly well and only 48 percent perceiving their talents are utilized at least fairly well.

XX. PLANS AND SCHEDULING PERSONNEL (GRP481). This independent job type of 14 personnel performs a job somewhat similar to Job Controllers described earlier, but seem to be more involved with scheduling the usage of and periodic inspections of radio equipment, rather than with the monitoring of radio equipment performance and the consequential scheduling of maintenance activities. Typical tasks performed by these incumbents include:

- schedule inspections
- prepare maintenance activity schedules
- prepare maintenance schedules
- schedule use of equipment
- establish organizational policies, office instructions (OI),
or standard operating procedures (SOP)

Sixty-four percent of these incumbents hold DAFSC 304X4, and 43 percent are stationed overseas. These incumbents are fairly senior, averaging 134 months TAFMS, with none of them being in their first enlistment. These personnel have average job satisfaction indicators, with 72 percent finding their job interesting and 43 percent planning to reenlist.

XXI. SUPPLY PERSONNEL (GRP281). The ten personnel in this independent job type are responsible for maintaining the availability of spare parts and for the scheduling of various types of equipment for Precision Measurement Equipment Laboratory (PMEL) inspections. These incumbents do not report maintaining radio equipment, but instead spend almost half of their job time performing supply functions. Typical tasks performed by a majority of these incumbents include:

- maintain bench stocks
- coordinate local purchases with maintenance offices or base supply
- coordinate equipment calibration PMEL
- maintain equipment accountability records
- direct supply functions or tool crib operations

Sixty percent of these incumbents hold DAFSC 30454, and 30 percent hold DAFSC 304X0. These incumbents have mixed job satisfaction indicators, with only 40 percent finding their job interesting, but 90 percent perceive their talents are being utilized at least fairly well or better.

XXII. LIMITED EXPERIENCE QUALITY CONTROL PERSONNEL (GRP464). These personnel perform a quality control job, but only perform half as many tasks (15 versus 38) as Quality Control Personnel described earlier. This lower average number of tasks performed is not due to these incumbent's lack of radio maintenance experience, but instead due to the fact that they have just assumed a quality control type job. The tasks most commonly performed by these NCOs are all quality control related, such as:

- maintain technical order (TO) files
- prepare activity reports
- schedule inspections
- prepare evaluation reports
- evaluate compliance with performance standards

Seventy percent of these personnel hold DAFSC 304X4, with the remainder holding DAFSC 304X0. A majority of these incumbents are stationed overseas (60 percent), and these personnel have an average paygrade of E-6. While only 50 percent of these respondents find their job interesting, 80 percent plan to reenlist.

Summary

A wide variety of jobs are performed by DAFSC 304X4 personnel. These jobs can be roughly divided into two categories. The first category would include all those 304X4 personnel performing primarily a ground radio installation or maintenance type of job, and encompasses 10 of the 22 major job groups identified. The differentiating factors among these 10 job groups appears to be either the mission performed, the equipment maintained, or average number of tasks performed.

The second category of 12 major job groups is primarily nontechnical in nature, and involves supervision, administration, or training rather than ground radio maintenance or installation functions. A minority of DAFSC 304X4 personnel are in this category, and the key differentiating factor among these jobs appears to be the differing amounts of job time spent performing supervisory, administrative, or training duties.

A review of job satisfaction data reveals that job satisfaction varies considerably between major job groups. E&I Personnel appear to be among the most satisfied; Fixed E&I Personnel are among the most dissatisfied. NCOICs, Job Control, Job Controllers, and Plans and Scheduling Personnel are among the most dissatisfied of all major job groups. This is primarily due to the fact that these personnel are performing an administrative type job rather than one involving ground radio maintenance. Management personnel need to be aware of these potential problem areas and try to find ways to correct the current situation.

TABLE 4
RELATIVE PERCENT TIME SPENT ON DUTIES BY MAJOR JOB GROUPS

DUTIES	GROUND RADIO MAINT PERS (GRP336, N=607)	ELEC SEC PERS (GRP712, N=61)	PUBLIC ADDRESS EQUIP REP (GRP359, N=15)	E&I PERS (GRP264, N=15)	AERO STATION & GIANT TALK PERS (GRP186, N=136)	TITAN RADIO REP (GRP330, N=11)	SR RADIO REP (GRP663, N=38)	JR GROUND RADIO MAINT PERS (GRP257, N=22)
ORGANIZING AND PLANNING	2	2	2	*	2	4	2	2
DIRECTING AND IMPLEMENTING	3	3	2	2	2	3	2	1
INSPECTING AND EVALUATING	1	1	*	*	2	*	2	*
TRAINING	3	3	1	1	3	3	2	*
PREPARING AND MAINTAINING FORMS, RECORDS, AND REPORTS	3	2	1	2	3	3	1	4
PERFORMING SUPPLY FUNCTIONS	3	3	4	*	3	4	2	3
PERFORMING EQUIPMENT OPERATION FUNCTIONS	6	6	5	11	9	7	4	15
PERFORMING SATELLITE OPERATION FUNCTIONS	*	*	*	*	*	*	*	*
PERFORMING GENERAL MAINTENANCE FUNCTIONS	12	18	15	26	13	15	9	19
MAINTAINING ANTENNA SYSTEMS	2	1	*	3	2	1	3	*
MAINTAINING RECEIVERS TO INCLUDE RECEIVE PORTION OF TRANSCIEVERS	18	26	20	19	8	13	15	22
MAINTAINING TRANSMITTERS TO INCLUDE TRANSMIT PORTION OF TRANSCIEVERS	20	*	11	12	12	23	15	15
MAINTAINING VOICE FREQUENCY MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	*	*	8	*
MAINTAINING TELETYPE MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	*	*	4	*
MAINTAINING COMMUNICATION OR CONTROL CONSOLES	4	*	7	*	*	*	*	2
MAINTAINING AUDIO OR FACSIMILE EQUIPMENT	4	8	16	2	1	*	*	1
MAINTAINING SCOPE CONTROL OR UNIVERSAL RADIO GRP EQUIPMENT	*	*	*	*	14	*	*	*
MAINTAINING MODEMS	*	*	*	*	*	*	1	*
MAINTAINING TRACKING SYSTEMS	*	*	*	*	*	1	*	*
MAINTAINING BASE AND INSTALLATION SECURITY SYSTEMS	*	*	*	1	*	*	3	*
MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES	12	19	8	6	15	15	20	4
PERFORMING SITE INSTALLATION OR MOVING FUNCTIONS	2	*	*	7	*	*	3	*
PERFORMING SUPPORT FUNCTIONS	5	5	4	5	3	5	3	10

*DENOTES LESS THAN ONE PERCENT

TABLE 5
RELATIVE PERCENT TIME SPENT ON DUTIES BY MAJOR JOB GROUPS (CONTINUED)

DUTIES	COMM- ELEC PERS (GRP434, N=11)	QC PERS (GRP117, N=121)	FIRSTLINE MAINT SUPVs (GRP393, N=148)	NCOICs, JOB CONTROL (GRP564, N=41)	RADIO MAINT SUPVs (GRP650, N=160)	RES TNG SUPVs (GRP711, N=10)	TOOL CRIB SUPVs (GRP442, N=12)	FIXED E&I PERS (GRP154, N=40)
ORGANIZING AND PLANNING	4	16	9	23	21	17	13	*
DIRECTING AND IMPLEMENTING	3	12	10	23	20	21	18	2
INSPECTING AND EVALUATING	2	31	7	12	19	15	10	*
TRAINING	3	7	9	17	13	37	7	*
PREPARING AND MAINTAINING FORMS, RECORDS, AND REPORTS	4	18	6	19	9	4	12	*
PERFORMING SUPPLY FUNCTIONS	5	5	6	3	7	3	18	*
PERFORMING EQUIPMENT OPERATION FUNCTIONS	7	2	5	*	1	*	3	*
PERFORMING SATELLITE OPERATION FUNCTIONS	*	*	*	*	*	*	*	*
PERFORMING GENERAL MAINTENANCE FUNCTIONS	28	3	9	*	3	*	8	38
MAINTAINING ANTENNA SYSTEMS	*	*	1	*	*	*	*	*
MAINTAINING RECEIVERS TO INCLUDE RECEIVE PORTION OF TRANSCIVERS	3	*	9	*	1	*	*	2
MAINTAINING TRANSMITTERS TO INCLUDE TRANSMIT PORTION OF TRANSCIVERS	2	*	7	*	1	*	*	*
MAINTAINING VOICE FREQUENCY MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	2	*	3	*	*	*	*	*
MAINTAINING TELETYPE MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	*	*	*	*
MAINTAINING COMMUNICATION OR CONTROL CONSOLES	*	*	*	*	*	*	*	*
MAINTAINING AUDIO OR FACSIMILE EQUIPMENT	15	*	2	*	*	*	1	*
MAINTAINING SCOPE CONTROL OR UNIVERSAL RADIO GRP EQUIPMENT	*	*	*	*	*	*	*	*
MAINTAINING MODEMS	*	*	*	*	*	*	*	*
MAINTAINING TRACKING SYSTEMS	*	*	*	*	*	*	*	*
MAINTAINING BASE AND INSTALLATION SECURITY SYSTEMS	*	*	*	*	*	*	*	*
MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES	12	*	8	*	*	*	*	*
PERFORMING SITE INSTALLATION OR MOVING FUNCTIONS	1	1	1	*	*	*	1	*
PERFORMING SUPPORT FUNCTIONS	6	2	4	2	2	*	3	35
							6	14

*DENOTES LESS THAN ONE PERCENT

TABLE 6

RELATIVE PERCENT TIME SPENT ON DUTIES BY MAJOR JOB GROUPS (CONTINUED)

DUTIES	RES TECH SCHOOL INST (GRP243, N=77)	INST AND MAINT PERS (GRP227, N=19)	JOB CONTROL (GRP491, N=58)	PLANS AND SCHED (GRP481, N=14)	SUPPLY (GRP281, N=10)	LIMITED EXP QC PERS (GRP464, N=10)
ORGANIZING AND PLANNING	3	5	28	26	8	10
DIRECTING AND IMPLEMENTING	9	9	16	18	16	8
INSPECTING AND EVALUATING	3	6	5	6	2	17
TRAINING	69	35	5	6	4	7
PREPARING AND MAINTAINING FORMS, RECORDS, AND REPORTS	2	3	38	30	9	49
PERFORMING SUPPLY FUNCTIONS	1	3	3	4	48	*
PERFORMING EQUIPMENT OPERATION FUNCTIONS	*	11	*	8	3	*
PERFORMING SATELLITE OPERATION FUNCTIONS	*	*	*	*	*	*
PERFORMING GENERAL MAINTENANCE FUNCTIONS	2	7	*	*	4	*
MAINTAINING ANTENNA SYSTEMS	*	*	*	*	*	*
MAINTAINING RECEIVERS TO INCLUDE RECEIVE PORTION OF TRANSCEIVERS	1	6	*	*	2	*
MAINTAINING TRANSMITTERS TO INCLUDE TRANSMIT PORTION OF TRANSCEIVERS	*	3	*	*	*	*
MAINTAINING VOICE FREQUENCY MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	2	4	*	*	*	*
MAINTAINING TELETYPE MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	1	3	*	*	*	*
MAINTAINING COMMUNICATION OR CONTROL CONSOLES	*	*	*	*	*	*
MAINTAINING AUDIO OR FACSIMILE EQUIPMENT	*	*	*	*	*	*
MAINTAINING SCOPE CONTROL OR UNIVERSAL RADIO GROUP EQUIPMENT	*	*	*	*	*	*
MAINTAINING MODEMS	*	*	*	*	*	*
MAINTAINING TRACKING SYSTEMS	*	*	*	*	*	*
MAINTAINING BASE AND INSTALLATION SECURITY SYSTEMS	*	*	*	*	*	*
MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES	*	3	*	*	*	*
PERFORMING SITE INSTALLATION OR MOVING FUNCTIONS	5	*	*	*	*	*
PERFORMING SUPPORT FUNCTIONS	4	1	4	2	2	7

*DENOTES LESS THAN ONE PERCENT

TABLE 7

BACKGROUND INFORMATION FOR MAJOR JOB GROUPS

	GROUND RADIO MAINT PERS	ELEC SEC PERS	PUBLIC ADD EQUIP REP	E&I PERS	AERO STATION & GIANT TALK PERS	TITAN RADIO REP	SR RADIO REP	JR GROUND RADIO MAINT PERS
AVERAGE NUMBER OF TASKS PERFORMED:	125	99	65	64	111	72	275	32
JOB DIFFICULTY INDEX:	16.4	14.3	11.2	10.6	15.9	12.0	25.0	6.5
AVERAGE PAYGRADE:	E-4	E-3	E-4	E-4	E-4	E-3, E-4	E-4, E-5	E-3
PERCENT LOCATED OVERSEAS:	31%	95%	33%	13%	55%	-	32%	23%

DAFSC

30434	15%	-	40%	40%	7%	27%	3%	32%
30454	68%	72%	53%	40%	66%	73%	18%	68%
30474	16%	26%	-	13%	24%	-	-	-
304X0	1%	-	7%	7%	3%	-	73%	-
304X6	-	-	-	-	-	-	6%	-
OTHER	-	2%	-	-	-	-	-	-

AVERAGE NUMBER OF PERSONNEL

SUPERVISED:	1	1	-	-	1	1	1	-
AVERAGE MONTHS TAFMS:	67	91	40	48	79	37	90	32
PERCENT IN FIRST ENLISTMENT:	52%	16%	80%	67%	38%	73%	50%	81%

PERCENT MAINTAINING THE
FOLLOWING EQUIPMENT:

208U-3	6%	-	6%	4%	42%	-	5%	9%
208U-10	5%	-	-	-	45%	-	5%	9%
310V-1	2%	-	-	7%	40%	-	3%	4%
AN/FRC-153	41%	-	60%	20%	4%	-	11%	23%
UWM-2/2A	52%	2%	67%	20%	4%	-	8%	18%
R-390A	27%	77%	67%	-	30%	-	5%	18%
AN/GRC-171	68%	2%	87%	27%	4%	-	8%	41%
AN/GRC-175	51%	-	80%	13%	3%	-	11%	14%
AN/GRR-23	42%	-	67%	13%	6%	-	8%	23%
AN/GRR-24	65%	21%	80%	13%	8%	-	8%	41%
AN/GRR-25	31%	-	53%	13%	4%	-	3%	9%
AN/GRT-21	51%	-	80%	20%	5%	-	8%	18%
AN/GRT-22	66%	-	80%	20%	5%	-	8%	46%
AN/MRC-107	14%	-	-	14%	-	-	3%	-
AN/TSC-60(V) 1/2	10%	-	-	13%	2%	-	3%	5%
AN/GRC-117	-	-	-	-	-	91%	-	5%
DL-19W	14%	-	40%	-	2%	-	5%	9%
R-2174/R-390A	12%	48%	27%	-	9%	-	-	14%

TABLE 8

BACKGROUND INFORMATION FOR MAJOR JOB GROUPS (CONTINUED)

	COMM- ELEC PERS	QC PERS	FIRSTLINE MAINT SUPVs	NCOICs, JOB CONTROL	RADIO MAINT PERS	RES TNG SUPVs	TOOL CRIB SUPVs	FIXED E&I PERS
AVERAGE NUMBER OF TASKS PERFORMED:	64	38	164	40	83	50	56	17
JOB DIFFICULTY INDEX:	9.8	10.8	18.9	10.3	14.0	12.2	9.3	2.9
AVERAGE PAYGRADE:	E-5	E-6	E-5/E-6	E-6	E-6/E-7	E-7	E-6	E-3, E-4
PERCENT LOCATED OVERSEAS:	27%	38%	58%	49%	48%	-	75%	22%

DAFSC

30434	-	-	2%	-	-	-	-	7%
30454	46%	16%	11%	15%	3%	10%	17%	37%
30474	54%	49%	38%	58%	61%	40%	17%	3%
304X0	-	27%	44%	25%	22%	20%	41%	53%
304X6	-	6%	5%	2%	10%	20%	17%	-
OTHER	-	2%	-	-	4%	10%	8%	-

AVERAGE NUMBER OF PERSONNEL

SUPERVISED:	-	1	4	3	6	10	3	-
AVERAGE MONTHS TAFMS:	125	170	149	181	208	219	187	36
PERCENT IN FIRST ENLISTMENT:	18%	5%	5%	5%	-	-	8%	10%

PERCENT MAINTAINING THE
FOLLOWING EQUIPMENT:

208U-3	-	1%	3%	-	8%	-	-	3%
208U-10	-	1%	3%	-	6%	-	-	3%
310V-1	-	-	10%	-	6%	-	-	-
AN/FRC-153	9%	4%	25%	-	19%	-	17%	-
KWM-2/2A	18%	5%	26%	-	20%	-	8%	3%
R-390A	-	4%	12%	-	18%	10%	17%	-
AN/GRC-171	-	7%	30%	-	26%	-	25%	3%
AN/GRC-175	-	5%	18%	-	16%	-	25%	3%
AN/GRR-23	-	5%	14%	-	16%	-	25%	3%
AN/GRR-24	-	6%	30%	-	24%	-	25%	32
AN/GRR-25	-	3%	10%	-	13%	-	8%	32
AN/GRT-21	-	3%	17%	-	18%	-	25%	3%
AN/GRT-22	-	6%	30%	-	24%	-	25%	3%
AN/MRC-107	-	-	3%	-	6%	-	-	-
AN/TSC-60(V) 1/2	-	-	4%	-	4%	-	-	-
AN/GRC-117	-	2%	-	-	-	-	-	-
DL-19W	9%	-	7%	-	9%	-	8%	-
R-2174/R-390A	-	-	6%	-	6%	-	7%	-

TABLE 9

BACKGROUND INFORMATION FOR MAJOR JOB GROUPS (CONTINUED)

	RES TECH SCHOOL INST	INST AND MAINT PERS	JOB CONTROL	PLANS AND SCHED	SUPPLY PERS	LIMITED EXP QC PERS
AVERAGE NUMBER OF TASKS PERFORMED:	18	63	12	21	22	15
JOB DIFFICULTY INDEX:	7.6	12.3	5.5	7.2	4.4	6.1
AVERAGE PAYGRADE:	E-5	E-5	E-4	E-5	E-4, E-5	E-6
PERCENT LOCATED OVERSEAS:	3%	11%	33%	43%	20%	60%

DAFSC

30434	5%	-	-	-	-	-
30454	23%	16%	43%	21%	60%	10%
30474	23%	5%	7%	43%	-	60%
304X0	33%	31%	37%	28%	30%	30%
304X6	16%	48%	8%	7%	10%	-
OTHER	-	-	5%	1%	-	-

AVERAGE NUMBER OF PERSONNEL

SUPERVISED:	-	2	-	1	1	-
AVERAGE MONTHS TAFMS:	120	129	76	134	101	164
PERCENT IN FIRST ENLISTMENT:	22%	21%	39%	-	30%	10%

PERCENT MAINTAINING THE
FOLLOWING EQUIPMENT:

208U-3	-	-	-	-	-	-
208U-10	-	-	-	-	-	-
310V-1	-	-	-	-	-	-
AN/FRC-153	-	-	3%	-	20%	-
KWM-2/2A	-	-	3%	-	20%	10%
R-390A	-	-	2%	-	10%	-
AN/GRC-171	-	-	3%	-	30%	-
AN/GRC-175	-	-	2%	-	-	-
AN/GRR-23	-	-	3%	-	-	-
AN/GRR-24	-	-	3%	-	30%	-
AN/GRR-25	-	-	3%	-	10%	-
AN/GRT-21	-	-	5%	-	-	-
AN/GRT-22	-	-	5%	-	20%	-
AN/MRC-107	-	-	5%	-	-	-
AN/TSC-60(V) 1/2	1%	-	-	-	10%	-
AN/GRC-117	-	-	2%	-	-	-
DL-19W	-	-	-	-	-	-
R-2174/R-390A	-	-	-	-	-	-

TABLE 10

JOB SATISFACTION AND RELATED DATA FOR MAJOR JOB GROUPS
(PERCENT MEMBERS PERFORMING)

	GROUND RADIO MAINT PERS	ELEC SEC PERS	PUBLIC EQUIP REP	ADD	E&I PERS	AERO STATION & GIANT TALK PERS	TITAN RADIO REP	SR RADIO REP	JR GROUND RADIO MAINT PERS
<u>I FIND MY JOB:</u>									
DULL	9	10	-	-	-	11	-	11	9
SO-SO	16	26	20	7	15	18	11	14	14
INTERESTING	75	64	80	93	74	82	78	77	77
<u>MY JOB UTILIZES MY TALENTS:</u>									
NOT AT ALL TO VERY LITTLE	17	20	27	27	15	-	26	41	41
FAIRLY WELL OR BETTER	83	80	73	73	85	100	74	59	59
<u>MY JOB UTILIZES MY TRAINING:</u>									
NOT AT ALL TO VERY LITTLE	13	15	-	27	18	-	21	46	46
FAIRLY WELL OR BETTER	87	85	100	73	82	100	79	54	54
<u>I PLAN TO REENLIST:</u>									
NO, PLANNING TO RETIRE	2	-	-	-	6	-	8	-	-
NO OR PROBABLY NO	49	53	53	60	40	36	50	68	68
YES OR PROBABLY YES	48	45	47	40	53	64	39	32	32

NOTE: COLUMNS MAY NOT ADD UP TO 100 PERCENT DUE TO "NO RESPONSE"

TABLE 11

JOB SATISFACTION AND RELATED DATA FOR MAJOR JOB GROUPS (CONTINUED)
(PERCENT MEMBERS PERFORMING)

	COMM- ELEC PERS	QC PERS	FIRST- LINE MAINT SUPVs	NCOICs, JOB CONTROL	RADIO MAINT SUPVs	RES TNG SUPVs	TOOL CRIB SUPVs	FIXED E&I PERS
<u>I FIND MY JOB:</u>								
DULL	9	11	12	27	8	-	17	13
SO-SO	27	14	9	17	12	20	17	33
INTERESTING	64	72	78	56	80	80	66	51
<u>MY JOB UTILIZES MY TALENTS:</u>								
NOT AT ALL TO VERY LITTLE	27	16	18	37	14	20	25	48
FAIRLY WELL OR BETTER	73	82	81	63	86	80	75	52
<u>MY JOB UTILIZES MY TRAINING:</u>								
NOT AT ALL TO VERY LITTLE	46	29	18	66	22	20	33	73
FAIRLY WELL OR BETTER	54	70	81	34	78	70	67	27
<u>I PLAN TO REENLIST:</u>								
NO, PLANNING TO RETIRE	9	23	16	27	36	30	25	3
NO OR PROBABLY NO	46	22	22	35	16	20	-	58
YES OR PROBABLY YES	45	55	61	38	47	40	75	39

NOTE: COLUMNS MAY NOT ADD UP TO 100 PERCENT DUE TO "NO RESPONSE"

TABLE 12

JOB SATISFACTION AND RELATED DATA FOR MAJOR JOB GROUPS (CONTINUED)
(PERCENT MEMBERS PERFORMING)

	<u>RES TECH SCHOOL INST</u>	<u>INST AND MAINT PERS</u>	<u>JOB CONTROL</u>	<u>PLANS AND SCHED</u>	<u>SUPPLY PERS</u>	<u>LIMITED EXP QC PERS</u>
<u>I FIND MY JOB:</u>						
DULL	13	5	24	14	10	20
SO-SO	8	16	17	14	50	30
INTERESTING	76	79	59	72	40	50
<u>MY JOB UTILIZES MY TALENTS:</u>						
NOT AT ALL TO VERY LITTLE	20	5	52	21	10	40
FAIRLY WELL OR BETTER	79	95	48	79	90	60
<u>MY JOB UTILIZES MY TRAINING:</u>						
NOT AT ALL TO VERY LITTLE	21	11	79	57	40	40
FAIRLY WELL OR BETTER	96	89	21	43	60	60
<u>I PLAN TO REENLIST:</u>						
NO, PLANNING TO RETIRE	10	11	3	7	10	
NO OR PROBABLY NO	29	37	52	50	50	20
YES OR PROBABLY YES	60	52	45	43	40	80

NOTE: COLUMNS MAY NOT ADD UP TO 100 PERCENT DUE TO "NO RESPONSE"

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups forms a part of each occupational analysis. This analysis should be used to help identify similarities and differences among skill level groups in the 304X4 specialty, and to note how the job performed by various skill level groups changes with increasing skill levels. This analysis can be particularly helpful by comparing the findings of the tasks and duties performed by 3-, 5-, and 7-skill level personnel with those described in various career ladder documents, such as AFR 39-1 Specialty Descriptions and the 304X4 Specialty Training Standard (STS).

The DAFSC analysis of the 304X4 specialty will discuss the duties and tasks common to the 3-, 5-, and 7-skill level groups, as well as highlighting the tasks which best differentiate the incumbents holding each skill level.

Skill Level Comparisons

As in many career ladders, the job performed by 3-skill level respondents is primarily maintenance oriented. These personnel spend approximately 90 percent of their job time performing maintenance related duties, with two duties, maintaining transmitters to include transmit portion of transceivers and maintaining receivers to include receive portion of transceivers making up approximately one-third of their job time (see Table 13). This is realistic with the 304X4 career ladder structure, since most 3-skill level personnel can be found in maintenance oriented job groups, such as Ground Radio Maintenance Personnel or Public Address Equipment Repairmen (Table 14). Table 15 lists the most common tasks performed by DAFSC 30434 personnel, as well as the corresponding percentage of 3-skill level personnel performing each task. Most of the tasks performed by more than 40 percent of 3-skill level personnel involve some aspect of routine radio maintenance, and include aligning AM receivers, adjusting automatic gain control (AGC) components, adjusting UHF power amplifier components, or inspecting the safety of equipment.

The job performed does not change very much at the 5-skill level, with Table 13 revealing that these incumbents also spend a majority of their job time performing technical radio maintenance functions. A review of the types of jobs performed by DAFSC 30454 personnel in Table 14 reveals these incumbents are primarily performing different types of radio maintenance oriented jobs, many of which also are made up of substantial percentages of 3-skill level personnel, such as Ground Radio Maintenance Personnel or Junior Ground Radio Maintenance Personnel. In addition to duty and job similarities between 3- and 5-skill level personnel, an examination of Table 16 reveals that the tasks performed by the highest percentages of DAFSC 30454 personnel are also performed by substantial percentages of 3-skill level personnel, and include performing corrosion control, adjusting squelch circuit components, and adjusting receive intermediate frequency (IF) amplifier components.

Even though the duties, tasks, and jobs performed by 3- and 5-skill level personnel are the same or similar, some differences between these two skill level groups can be found. The most apparent difference between the two skill level groups and one that can also be noted in the tasks which best differentiate these groups is the somewhat larger amount of job time spent by 5-skill level personnel performing supervisory duties (16 percent versus 6 percent). This trend is highlighted in Table 17, which lists the tasks which best differentiate 3- and 5-skill level personnel. Many of the tasks which best differentiate these two skill level groups are supervisory in nature, with tasks such as preparing APRs, conducting OJT, or supervising DAFSC 30434 personnel being performed by substantially higher percentages of 5-skill level personnel.

An examination of the duties and tasks performed by 7-skill level personnel tends to indicate that these personnel are the firstline supervisors at many ground radio maintenance facilities, and spend approximately one-half of their job time performing supervisory duties, with the remainder spent on administration or maintenance functions (Table 13). However, an examination of the most common tasks performed by DAFSC 30474 personnel (Table 18) reveals that supervisory tasks, such as determining work priorities, developing work methods or procedures, planning work assignments, or supervising DAFSC 30454 personnel are performed by fairly high percentages of 7-skill level personnel. This trend is reflected in Table 14, with a majority of 7-skill level personnel performing supervisory oriented jobs, such as Radio Maintenance Supervisors or Firstline Maintenance Supervisors.

When comparing the duties performed by DAFSC 30454 and 30474 personnel, the most apparent difference occurs with the amount of job time both groups spend performing supervisory and maintenance functions. Table 13 reveals 7-skill level personnel spend about 50 percent of their job time performing supervisory duties, while 5-skill level personnel report spending only 16 percent of their job time on the same duties. Also, 5-skill level personnel spend approximately twice as much job time performing maintenance related duties than DAFSC 30474 personnel. These duty differences can also be noted in Table 19, which lists the tasks which best differentiate 5- and 7-skill level personnel. Tasks involving radio maintenance, such as aligning AM receivers, constructing shop cables or test plugs, or adjusting automatic gain control (AGC) components are performed by substantially higher percentages of 5-skill level personnel, while supervisory tasks, such as preparing APRs, scheduling leaves or passes, or planning work assignments are performed by higher percentages of DAFSC 30474 personnel.

Summary

As skill levels increase, personnel in this specialty report spend more time on supervisory functions and less time performing maintenance duties, with 3-skill level personnel spending about 90 percent of their job time on maintenance duties and 7-skill level personnel spending only about 40 percent of their job time performing the same duties. Overall, the job performed by 3- and 5-skill level personnel are very similar, with the increased supervisory responsibilities of 5-skill personnel being the biggest discriminating factor between these two groups. The job performed by 5- and 7- skill level personnel is somewhat less similar, with DAFSC 30454 personnel performing a maintenance oriented job, and DAFSC 30474 personnel performing a job similar to firstline supervisors.

TABLE 13
RELATIVE PERCENT TIME SPENT ON DUTIES BY
304X4 SKILL LEVEL GROUPS

DUTIES	3-SKILL LEVEL PERSONNEL (N=177)	5-SKILL LEVEL PERSONNEL (N=917)	7-SKILL LEVEL PERSONNEL (N=524)
ORGANIZING AND PLANNING	2	5	13
DIRECTING AND IMPLEMENTING	2	4	13
INSPECTING AND EVALUATING	*	2	12
TRAINING	2	5	11
PREPARING AND MAINTAINING FORMS, RECORDS, AND REPORTS	3	5	10
PERFORMING SUPPLY FUNCTIONS	2	4	5
PERFORMING EQUIPMENT OPERATION FUNCTIONS	9	6	3
PERFORMING SATELLITE OPERATION FUNCTIONS	*	*	*
PERFORMING GENERAL MAINTENANCE FUNCTIONS	16	12	7
MAINTAINING ANTENNA SYSTEMS	1	1	*
MAINTAINING RECEIVERS TO INCLUDE RECEIVER PORTION OF TRANSCEIVERS	17	14	7
MAINTAINING TRANSMITTERS TO INCLUDE TRANSMIT PORTION OF TRANSCEIVERS	17	13	6
MAINTAINING VOICE FREQUENCY MULTIPLEXERS AND ASSOCIATED INTERPACE EQUIPMENT	*	*	*
MAINTAINING TELETYPE MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*
MAINTAINING COMMUNICATION OR CONTROL CONSOLES	3	3	1
MAINTAINING AUDIO OR FACSIMILE EQUIPMENT	3	3	2
MAINTAINING SCOPE CONTROL OR UNIVERSAL RADIO GROUP EQUIPMENT	*	2	*
MAINTAINING MODEMS	*	*	*
MAINTAINING TRACKING SYSTEMS	*	*	*
MAINTAINING BASE AND INSTALLATION SECURITY SYSTEMS	1	*	*
MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES	9	10	4
PERFORMING SITE INSTALLATION OR MOVING FUNCTIONS	3	3	1
PERFORMING SUPPORT FUNCTIONS	6	6	3

*DENOTES LESS THAN ONE PERCENT

TABLE 14

DAFSC DISTRIBUTION ACROSS MAJOR JOB GROUPS

MAJOR JOB GROUPS	DAFSC			
	30434	30454	30474	OTHER*
GROUND RADIO MAINTENANCE PERSONNEL	91	413	97	6
ELECTRONIC SECURITY PERSONNEL	-	44	17	-
PUBLIC ADDRESS EQUIPMENT PERSONNEL	6	8	-	1
ENGINEERING AND INSTALLATION PERSONNEL	6	6	2	1
AERONAUTICAL STATION AND GIANT TALK EQUIPMENT PERSONNEL	10	90	33	3
TITAN RADIO REPAIRMEN	3	8	-	-
SENIOR RADIO REPAIRMEN	1	6	-	31
JUNIOR GROUND RADIO MAINTENANCE PERSONNEL	7	15	-	-
COMMUNICATIONS-ELECTRONICS PERSONNEL	-	5	6	-
QUALITY CONTROL PERSONNEL	-	19	59	46
FIRSTLINE MAINTENANCE SUPERVISORS	3	16	56	73
NCOICs, JOB CONTROL	-	6	24	11
RADIO MAINTENANCE SUPERVISORS	-	5	98	57
RESIDENT TRAINING SUPERVISORS	-	1	4	5
TOOL CRIB SUPERVISORS	-	2	2	8
FIXED E&I PERSONNEL	3	15	1	21
RESIDENT TECHNICAL SCHOOL INSTRUCTORS	4	18	18	37
INSTRUCTORS AND MAINTENANCE PERSONNEL	-	3	1	15
JOB CONTROLLERS	-	25	4	29
PLANS AND SCHEDULING PERSONNEL	-	3	6	5
SUPPLY PERSONNEL	-	6	-	4
LIMITED EXPERIENCE QC PERSONNEL	-	1	6	3
NOT GROUPED	43	202	90	-
TOTAL	177	917	524	

*NOTE: THE OTHER COLUMN DOES NOT ADD DUE TO THE FACT THAT 304X0 AND 304X6 PERSONNEL ARE INCLUDED HERE

TABLE 15

REPRESENTATIVE TASKS PERFORMED BY DAFSC 30434 AIRMEN

TASKS	PERCENT MEMBERS PERFORMING (N=177)
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	78
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	77
K273 ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	73
W836 CLEAN MAINTENANCE WORK AREAS	72
I125 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICROMINIATURE COMPONENTS USING SOLDERING METHODS	70
K286 ADJUST SQUELCH CIRCUIT COMPONENTS	67
I206 PERFORM CORROSION CONTROL	64
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	62
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	60
K284 ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	59
K291 ALIGN AM RECEIVERS	58
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	55
L409 PERFORM PMIs ON AM UHF TRANSMITTERS OR EXCITERS	54
I195 INSPECT SAFETY OF EQUIPMENT	53
L359 ALIGN AM UHF TRANSMITTERS OR EXCITERS	51
L355 ADJUST ULTRA HIGH FREQUENCY (UHF) POWER AMPLIFIER COMPONENTS	51
K289 ADJUST ULTRA HIGH FREQUENCY (UHF) RECEIVE RF AMPLIFIER COMPONENTS	51
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	49
K303 ISOLATE MALFUNCTIONS IN SOLID STATE AM RECEIVERS	49
L353 ADJUST TRANSMIT GAIN, AUTOMATIC LOAD, OR AUTOMATIC LEVELING CONTROL COMPONENTS	49
K272 ADJUST AMPLITUDE MODULATION (AM) DETECTOR COMPONENTS	48
K334 PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON AM RECEIVERS	47
E120 MAKE ENTRIES ON MAINTENANCE FORMS	45
L404 ISOLATE MALFUNCTIONS IN UHF POWER AMPLIFIERS	44
I196 INSTALL OR REMOVE MOUNTING HARDWARE	44
I128 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES, SUCH AS MODULES OR PRINTED CIRCUIT BOARDS, USING SOLDERING METHODS	44
U729 ALIGN TRANSCEIVERS	44
I129 CRATE OR UNCRATE COMPONENTS OR MODULES	43
L348 ADJUST HIGH VOLTAGE POWER SUPPLY COMPONENTS	43
L354 ADJUST TRANSMITTER OR EXCITER INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	42
U692 ADJUST AUDIO AMPLIFIER COMPONENTS	42

TABLE 16

REPRESENTATIVE TASKS PERFORMED BY DAFSC 30454 AIRMEN

TASKS	PERCENT MEMBERS PERFORMING (N=917)
W836 CLEAN MAINTENANCE WORK AREAS	74
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	71
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	68
I206 PERFORM CORROSION CONTROL	67
K273 ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	66
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	64
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	64
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	59
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	59
K284 ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	59
K291 ALIGN AM RECEIVERS	55
K286 ADJUST SQUELCH CIRCUIT COMPONENTS	55
E120 MAKE ENTRIES ON MAINTENANCE FORMS	54
F141 PREPARE NONREPARABLE OR REPARABLE ITEMS FOR TURN-IN	54
I195 INSPECT SAFETY OF EQUIPMENT	53
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	53
U692 ADJUST AUDIO AMPLIFIER COMPONENTS	52
K334 PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON AM RECEIVERS	51
K276 ADJUST HF RECEIVE RF AMPLIFIER COMPONENTS	50
I221 REMOVE OR REPLACE MECHANICAL SUBASSEMBLIES	49
K289 ADJUST ULTRA HIGH FREQUENCY (UHF) RECEIVE RF AMPLIFIER COMPONENTS	47
D89 CONDUCT OJT	46
L409 PERFORM PMIs ON AM UHF TRANSMITTERS OR EXCITERS	45
K303 ISOLATE MALFUNCTIONS IN SOLID STATE AM RECEIVERS	45
K272 ADJUST AMPLITUDE MODULATION (AM) DETECTOR COMPONENTS	45
I353 ADJUST TRANSMIT GAIN, AUTOMATIC LOAD, OR AUTOMATIC LEVELING CONTROL COMPONENTS	44
I224 SPLICE WIRING OR CABLES	44
I213 REMOVE OR REPLACE ELECTROMECHANICAL SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	44
I359 ALIGN AM UHF TRANSMITTERS OR EXCITERS	44
I207 PERFORM SAFETY INSPECTIONS	44
K293 ALIGN SIDEBAND RECEIVERS	43
L355 ADJUST ULTRA HIGH FREQUENCY (UHF) POWER AMPLIFIER COMPONENTS	43

TABLE 17

REPRESENTATIVE TASKS WHICH BEST DIFFERENTIATE DAFSC 30434
AND 30454 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 30434 PERSONNEL (N=177)	DAFSC 30454 PERSONNEL (N=917)	DIFFERENCE
ADJUST SQUELCH CIRCUIT COMPONENTS	67	55	+12
MAINTAIN STATUS BOARDS OR CHARTS	22	32	-10
ADJUST AUDIO AMPLIFIER COMPONENTS	42	52	-10
DETERMINE OJT TRAINING REQUIREMENTS	2	13	-11
ADJUST HIGH FREQUENCY (HF) MIXER COMPONENTS	17	28	-11
ISOLATE MALFUNCTIONS IN TUBE TYPE AM RECEIVERS	19	30	-11
PERFORM PMIs ON LINE AMPLIFIERS	18	29	-11
MAINTAIN PUBLICATION FILES	11	23	-12
ISOLATE MALFUNCTIONS IN MAIN DISTRIBUTION FRAMES AND ASSOCIATED WIRING	6	18	-12
ISOLATE MALFUNCTIONS IN LINE AMPLIFIERS	19	31	-12
REVIEW TABLE OF ALLOWANCES (TA)	2	14	-12
DEVELOP WORK METHODS OR PROCEDURES	10	23	-13
PREPARE REQUISITIONS FOR PARTS, TOOLS, OR SUPPLIES	29	42	-13
EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	6	20	-14
RESEARCH SUPPLY CATALOGS	17	31	-14
ISOLATE MALFUNCTIONS IN SYSTEMS TO SPECIFIC EQUIPMENT	24	40	-16
CONDUCT UPGRADE TRAINING	3	21	-18
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED MATTERS	6	25	-19
SUPERVISE GROUND RADIO COMMUNICATIONS SPECIALISTS (AFSC 30454)	4	24	-20
PREPARE APRs	4	26	-22
COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	10	35	-25
DETERMINE WORK PRIORITIES	13	39	-26
SUPERVISE APPRENTICE GROUND RADIO COMMUNICATIONS SPECIALISTS (AFSC 30434)	6	33	-27
DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	9	38	-29
CONDUCT OJT	11	46	-35

TABLE 18

REPRESENTATIVE TASKS PERFORMED BY DAFSC 30474 AIRMEN

TASKS	PERCENT MEMBERS PERFORMING (N=524)
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	69
C82 PREPARE APRs	68
A5 DETERMINE WORK PRIORITIES	65
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	63
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	60
B60 WRITE CORRESPONDENCE	57
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	57
A7 DEVELOP WORK METHODS OR PROCEDURES	57
B45 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	57
A19 PLAN WORK ASSIGNMENTS	54
B53 SUPERVISE GROUND RADIO COMMUNICATIONS SPECIALISTS (AFSC 30454)	54
D96 COUNSEL TRAINEES ON TRAINING PROGRESS	54
B46 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	53
D89 CONDUCT OJT	52
E120 MAKE ENTRIES ON MAINTENANCE FORMS	51
C66 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	51
A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	49
F142 PREPARE REQUISITIONS FOR PARTS, TOOLS, OR SUPPLIES	49
E114 MAINTAIN CORRESPONDENCE FILES	49
E117 MAINTAIN STATUS BOARDS OR CHARTS	49
A25 SCHEDULE LEAVES OR PASSES	49
I207 PERFORM SAFETY INSPECTIONS	48
A12 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	48
I195 INSPECT SAFETY OF EQUIPMENT	47
C71 EVALUATE INSPECTION REPORTS OR PROCEDURES	46
C64 EVALUATE CAPABILITY OF EQUIPMENT	46
D91 CONDUCT PROFICIENCY TRAINING	46
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	45
F145 REVIEW TABLE OF ALLOWANCES (TA)	45
F141 PREPARE NONREPARABLE OR REPARABLE ITEMS FOR TURN-IN	45
F144 RESEARCH SUPPLY CATALOGS	44
C73 EVALUATE MAINTENANCE OR USE OR WORKSPACE, EQUIPMENT, OR SUPPLIES	43

TABLE 19

REPRESENTATIVE TASKS WHICH BEST DIFFERENTIATE DAFSC 30454 AND 30474 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 30454 PERSONNEL (N=917)	DAFSC 30474 PERSONNEL (N=524)	DIFFERENCE
CLEAN MAINTENANCE WORK AREAS	74	37	+37
ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	66	36	+30
PERFORM TURN-ON OR TURN-OFF PROCEDURES	68	40	+28
PERFORM CORROSION CONTROL	67	40	+27
CONSTRUCT SHOP CABLES OR TEST PLUGS	64	37	+27
ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	59	32	+27
READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	71	45	+26
PERFORM PMIs ON AM RECEIVERS	51	26	+25
ADJUST SQUELCH CIRCUIT COMPONENTS	55	30	+25
ALIGN AM RECEIVERS	55	31	+24
ADJUST HF RECEIVE RF AMPLIFIER COMPONENTS	50	28	+22
PERFORM PMIs ON AM VHF TRANSMITTERS OR EXCITERS	25	5	+20
PERFORM PMIs ON SIDEBAND RECEIVERS	43	23	+20
SUPERVISE GROUND RADIO COMMUNICATIONS SPECIALISTS (AFSC 30454)	24	54	-30
SUPERVISE GROUND RADIO COMMUNICATIONS TECHNICIANS (AFSC 30474)	4	34	-30
PLAN WORK ASSIGNMENTS	24	55	-31
REVIEW TABLE OF ALLOWANCES (TA)	14	45	-31
MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	28	59	-31
ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	8	40	-32
ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	16	48	-32
INDORSE AIRMAN PERFORMANCE REPORTS (APR)	6	39	-33
DEVELOP WORK METHODS OR PROCEDURES	23	57	-34
EVALUATE INSPECTION REPORTS OR PROCEDURES	10	47	-37
SCHEDULE LEAVES OR PASSES	11	49	-38
MAINTAIN CORRESPONDENCE FILES	11	50	-39
WRITE CORRESPONDENCE	10	57	-47
PREPARE APRs	26	67	-41

ANALYSIS OF EXPERIENCE (TAFMS) GROUPS

In addition to the skill level analysis, survey respondents were also examined on the basis of months of Total Active Federal Military Service (TAFMS). This analysis helps to determine how jobs and job perceptions change over time, and can help describe the types of jobs and tasks junior personnel can look forward to performing in the future. Also included in this section is an in-depth analysis of 304X4 first-termers (1-48 months TAFMS), which examines the types of tasks performed, equipment maintained, test equipment utilized, and most common jobs performed by these first enlistment personnel.

Table 20 presents the relative time spent on duties by six different TAFMS groups, and reveals the different types of radio maintenance functions the personnel in each TAFMS group tend to concentrate on performing. As expected, no major deviations from the usual pattern of increasing time spent on supervisory duties with increasing months TAFMS were noted. Generally, junior airmen spend more time performing technical radio maintenance functions, such as performing general maintenance functions, maintaining receivers to include receive portion of transceivers, and maintaining transmitters to include transmit portion of transceivers, while senior 304X4 personnel spend increasing percentages of time on organizing and planning or training type duties.

Job Satisfaction Analysis

Job satisfaction indices for personnel in first-term (1-48 months TAFMS), second-term (49-96 months TAFMS), and career (97+ months TAFMS) groups were also examined. Table 21 contains job interest, perceived utilization of talents or training, and reenlistment intentions along with the comparative sample for personnel from all related career ladders analyzed in 1980. (These comparative sample career ladders include ones from the 30XXX, 32XXX, and 42XXX career fields.) When compared to the comparative sample, 304X4 first enlistment personnel have several substantially higher job satisfaction indicators, particularly in the areas of job interest (74 versus 56 percent) and perceived utilization of talents (78 versus 63 percent). Overall, second enlistment personnel are slightly more satisfied with their job than comparative sample personnel, with 304X4 second-termers reporting slightly higher indices in all four job satisfaction categories. Finally, 304X4 career personnel report job satisfaction indices very similar to career comparative sample personnel.

First Enlistment Personnel

Since various issues (primarily training) play such a key role for first enlistment personnel, these incumbents were additionally examined on the basis of the most common tasks and jobs performed and various types of background data (primarily equipment maintained and test equipment utilized). Table 22 lists representative tasks performed by relatively high percentages of 304X4 first-termers (1-48 months TAFMS). Generally, these most common

tasks involve some technical aspect of ground radio maintenance, such as aligning AM receivers, adjusting UHF receive RF amplifier components, adjusting squelch circuit components, and performing corrosion control.

Although the tasks listed in Table 22 are characteristic of most 304X4 first-term personnel, other functions performed by these incumbents vary depending on the job they perform. Figure 2 presents the distribution of 304X4 first-term personnel across job groups identified in the CAREER LADDER STRUCTURE section. As expected, a majority of 304X4 first enlistment personnel can be identified in the Ground Radio Maintenance Personnel cluster, with the Aeronautical Station and GIANT TALK Equipment Personnel cluster accounting for the next highest percentage of 304X4 first-termers. Tasks which are typically performed by first enlistment personnel in the major job groups revealed in Figure 2 include:

Ground Radio Maintenance Personnel

- perform PMIs on AM UHF transmitters or exciters
- adjust squelch circuit components
- align AM receivers

Aeronautical Station and GIANT TALK Equipment Personnel

- adjust URG status display readout components
- adjust high frequency (HF) power amplifier components
- adjust frequency shift keying (FSK) telephone components

Electronic Security Personnel

- adjust receive intermediate frequency (IF) amplifier components
- isolate malfunctions in tube type AM receivers
- perform PMIs on recorders and reproducers

Engineering and Installation (E&I) Personnel

- install or remove mounting hardware
- perform system modifications
- remove or replace mechanical subassemblies

Public Address Equipment Repairmen

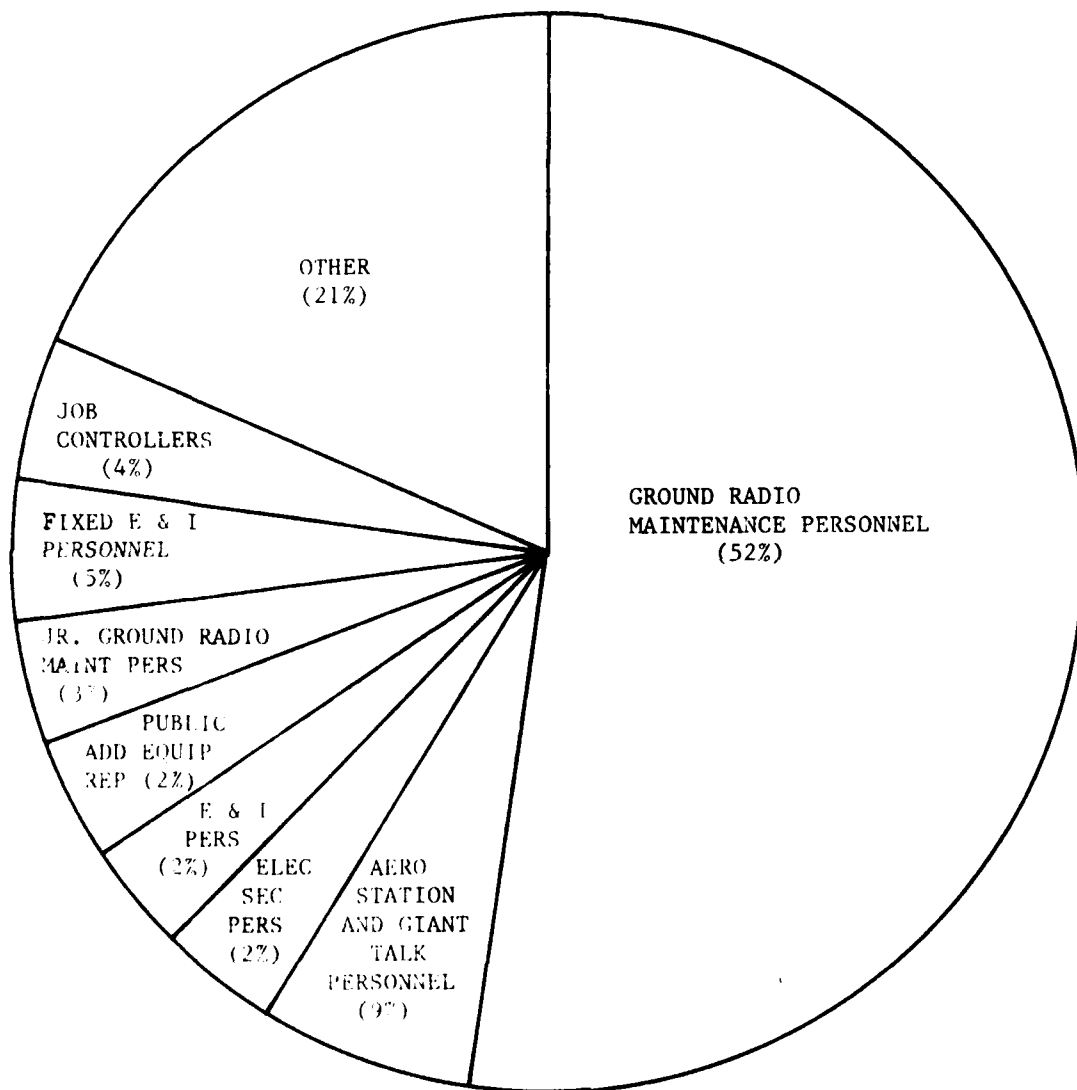
- perform PMIs on recorders or reproducers
- set up or remove public address systems
- adjust automatic gain control (AGC) components

Junior Ground Radio Maintenance Personnel

- perform corrosion control
- perform PMIs on AM receivers
- perform PMIs on AM UHF transmitters or exciters

FIGURE 2

JOB GROUP DISTRIBUTION FOR 304X4 FIRST ENLISTMENT PERSONNEL



Fixed E & I Personnel

- install or remove fixed communication equipment
- install or remove communications or control towers
- lace cable assemblies or internal wiring

Job Controllers

- maintain status boards or charts
- coordinate work activities with other units or agencies
- compile maintenance data

In addition to the analysis of tasks, various types of ground radio equipment and test equipment utilized by 304X4 first enlistment personnel were also examined. Table 23 reveals some interesting trends, particularly concerning the types of radio equipment maintained by first-termers versus the same types of equipment maintained by second-term and career personnel. Overall, a higher percentage of 304X4 first-termers maintain the most common types of ground radio systems than either 304X4 second enlistment or career personnel. This same trend can also be noted with the test equipment utilized, although this trend is not as great as with the radio systems maintained (see Table 23). This data indicates that first-termers in the 304X4 specialty are the primary maintenance personnel in the career ladder, and training personnel need to insure that 304X4 personnel graduating from resident technical school are fully capable for performing a ground radio maintenance job.

TABLE 20

RELATIVE PERCENT TIME SPENT ON DUTIES BY 304X4 TAFMS GROUPS

DUTIES	1-48 MOS (N=605)	49-96 MOS (N=354)	97- 144 MOS (N=230)	145- 192 MOS (N=186)	193- 240 MOS (N=174)	241+ MOS (N=66)
ORGANIZING AND PLANNING	2	5	8	12	16	18
DIRECTING AND IMPLEMENTING	2	5	9	11	15	16
INSPECTING AND EVALUATING	*	3	6	11	15	14
TRAINING	2	6	9	12	11	13
PREPARING AND MAINTAINING FORMS, RECORDS, AND REPORTS	5	5	7	9	11	11
PERFORMING SUPPLY FUNCTIONS	3	4	5	6	5	6
PERFORMING EQUIPMENT OPERATION FUNCTIONS	8	6	4	4	2	2
PERFORMING SATELLITE OPERATION FUNCTIONS	*	*	*	*	*	*
PERFORMING GENERAL MAINTENANCE FUNCTIONS	14	12	10	8	5	4
MAINTAINING ANTENNA SYSTEMS	1	1	*	1	*	*
MAINTAINING RECEIVERS TO INCLUDE RECEIVE PORTION OF TRANSCEIVERS	16	14	10	7	5	4
MAINTAINING TRANSMITTERS TO INCLUDE TRANSMIT PORTION OF TRANSCEIVERS	16	11	9	6	5	3
MAINTAINING VOICE FREQUENCY MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	*	*
MAINTAINING TELETYPE MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	*	*
MAINTAINING COMMUNICATION OR CONTROL CONSOLES	4	2	2	1	*	*
MAINTAINING AUDIO OR FACSIMILE EQUIPMENT	3	3	3	3	1	1
MAINTAINING SCOPE CONTROL OR UNIVERSAL RADIO GROUP EQUIPMENT	1	2	2	*	*	*
MAINTAINING MODEMS	*	*	*	*	*	2
MAINTAINING TRACKING SYSTEMS	*	*	*	*	*	*
MAINTAINING BASE AND INSTALLATION SECURITY SYSTEMS	*	*	*	*	*	*
MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES	10	10	8	5	3	2
PERFORMING SITE INSTALLATION OR MOVING FUNCTIONS	3	2	2	1	*	*
PERFORMING SUPPORT FUNCTIONS	6	5	4	3	3	3

*DENOTES LESS THAN ONE PERCENT

TABLE 21

JOB SATISFACTION AND RELATED DATA FOR 304X4 FIRST-TERM (1-48 MONTHS TAFMS),
SECOND-TERM (49-96 MONTHS TAFMS), AND CAREER (97+ MONTHS TAFMS) AND
COMPARATIVE SAMPLE PERSONNEL
(PERCENT MEMBERS RESPONDING)

	MONTHS TAFMS					
	1-48		49-96		97+	
	304X4 (N=605)	1980 COMP* SAMPLE (N=1,374)	304X4 (N=354)	1980 COMP* SAMPLE (N=853)	304X4 (N=156)	1980 COMP* SAMPLE (N=1,426)
<u>I FIND MY JOB:</u>						
DULL	9	24	13	17	13	14
SO-SO	17	20	21	22	16	16
INTERESTING	74	56	65	61	70	69
<u>MY JOB UTILIZES MY TALENTS:</u>						
NOT AT ALL TO VERY						
LITTLE	22	37	24	31	22	24
FAIRLY WELL OR BETTER	78	63	76	69	77	76
<u>MY JOB UTILIZES MY TRAINING:</u>						
NOT AT ALL TO VERY						
LITTLE	23	30	24	28	27	25
FAIRLY WELL OR BETTER	76	69	75	72	72	74
<u>I PLAN TO REENLIST:</u>						
NO, PLANNING TO						
RETIRE	1	-	1	-	20	-
NO OR PROBABLY NO	62	66	49	51	17	31
YES OR PROBABLY YES	36	33	49	48	62	68

*INCLUDES PERSONNEL IN AFSCs 30XXX, 32XXX, AND 42XXX

NOTE: COLUMNS MAY NOT ADD UP TO 100 PERCENT DUE TO "NO RESPONSE"

TABLE 22

REPRESENTATIVE TASKS PERFORMED BY 304X4 AIRMEN WITH 1-48 MONTHS TAFMS
(N=605)

TASKS	PERCENT MEMBERS PERFORMING
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	75
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	72
K273 ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	70
I206 PERFORM CORROSION CONTROL	67
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICROMINIATURE COMPONENTS USING SOLDERING METHODS	67
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	64
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	64
K286 ADJUST SQUELCH CIRCUIT COMPONENTS	62
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	60
K284 ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	59
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	59
K291 ALIGN AM RECEIVERS	58
L409 PERFORM PMIs ON AM UHF TRANSMITTERS OR EXCITERS	52
K289 ADJUST ULTRA HIGH FREQUENCY (UHF) RECEIVE RF AMPLIFIER COMPONENTS	51
K334 PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMIs) ON AM RECEIVERS	51
I195 INSPECT SAFETY OF EQUIPMENT	51
I692 ADJUST AUDIO AMPLIFIER COMPONENTS	50
L359 ALIGN AM UHF TRANSMITTERS OR EXCITERS	50
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	50
L355 ADJUST ULTRA HIGH FREQUENCY (UHF) POWER AMPLIFIER COMPONENTS	49
I218 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES, SUCH AS MODULES OR PRINTED CIRCUIT BOARDS, USING SOLDERING METHODS	49
L353 ADJUST TRANSMIT GAIN, AUTOMATIC LOAD, OR AUTOMATIC LEVELING CONTROL COMPONENTS	48
E120 MAKE ENTRIES ON MAINTENANCE FORMS	47
K303 ISOLATE MALFUNCTIONS IN SOLID STATE AM RECEIVERS	47
L348 ADJUST HIGH VOLTAGE POWER SUPPLY COMPONENTS	46
K272 ADJUST AMPLITUDE MODULATION (AM) DETECTOR COMPONENTS	46
U729 ALIGN TRANSCEIVERS	46
K276 ADJUST HF RECEIVE RF AMPLIFIER COMPONENTS	45
F141 PREPARE NONREPARABLE OR REPARABLE ITEMS FOR TURN-IN	45
I221 REMOVE OR REPLACE MECHANICAL SUBASSEMBLIES	45
L404 ISOLATE MALFUNCTIONS IN UHF POWER AMPLIFIERS	44
I196 INSTALL OR REMOVE MOUNTING HARDWARE	44
L408 PERFORM PMIs ON AM OR SIDEBAND HF TRANSMITTERS OR EXCITERS	44

TABLE 23

BACKGROUND INFORMATION FOR DAFSC 304X4 FIRST-TERM, SECOND-TERM, AND CAREER PERSONNEL

	1-48 MOS TAFMS PERSONNEL (N=605)	49-96 MOS TAFMS PERSONNEL (N=354)	97+ MOS TAFMS PERSONNEL (N=656)
AVERAGE NUMBER OF TASKS PERFORMED:	84	101	92
AVERAGE NUMBER OF PERSONS SUPERVISED:	-	1	3
PERCENT LOCATED OVERSEAS:	23%	45%	39%
PERCENT MAINTAINING EQUIPMENT UTILIZING MICROPROCESSOR TECHNOLOGY:	17%	28%	23%

PERCENT MAINTAINING THE FOLLOWING RADIO EQUIPMENT:

AN/GRC-171 VHF/UHF	50%	34%	30%
AN/GRR-24 VHF/UHF	47%	38%	30%
AN/GRT-22 VHF/UHF	47%	35%	29%
AN/GRT-21 VHF/UHF	37%	23%	22%
AN/GRC-175 UHF/UHF	36%	22%	21%
KWM-2/2A HF/SSB/ISB	35%	29%	24%
AN/GRR-23 VHF/UHF	30%	22%	19%
AN/FRC-153 HF/SSB/ISB	29%	23%	20%
R-390A HF/SSB/ISB	23%	27%	20%
AN/GRR-25 VHF/UHF	23%	12%	14%
AN/GRA-53/54 UHF/VHF	12%	11%	12%
DL-19W	11%	8%	8%
R-2174/R-390A	10%	12%	7%

TYPES OF TEST EQUIPMENT UTILIZED:

MULTIMETERS	93%	91%	73%
OSCILLOSCOPES	91%	90%	74%
RF SIGNAL GENERATORS	88%	86%	69%
AUDIO FREQUENCY SIGNAL GENERATORS	86%	72%	81%
VOLTAGE MEASURING EQUIPMENT	77%	76%	60%
DISTORTION ANALYZERS	77%	79%	62%
FREQUENCY MEASURING SETS	77%	77%	61%
POWER SUPPLIES	72%	71%	60%
TUBE TESTERS	70%	68%	54%
POWER METERS	67%	63%	64%
VSWR METERS	61%	56%	50%
HIGH VOLTAGE PROBES	49%	46%	36%
SPECTRUM ANALYZERS	46%	51%	42%
SEMICONDUCTOR TESTERS	41%	51%	42%
POWER AMPLIFIERS	40%	35%	29%
FLUTTER METERS	32%	32%	27%

COMPARISON OF SURVEY DATA TO AFR 39-1 SPECIALTY DESCRIPTIONS

Survey data for the 304X4 career ladder were compared to AFR 39-1 Specialty Descriptions, dated 31 October 1979 (for DAFSCs 30414, 30434, 30454, and 30474). These descriptions are intended to give a broad overview of the duties and tasks required to be performed by the various skill level personnel. Overall, the 3-, 5-, and 7-skill level descriptions were found to provide a clear, concise overview of the major duties and tasks performed by 304X4 incumbents.

ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS

A comparison was made between the tasks performed and the background data for the DAFSC 30454 personnel who were assigned within the CONUS versus those who were assigned to overseas locations. This analysis is primarily designed to determine what technical aspects of ground radio maintenance are different between CONUS and overseas locations. This section can be useful to management and training personnel by highlighting the task, equipment, and various other background data differences between CONUS and overseas locations.

Overall, the jobs and tasks performed by these two groups of personnel are very similar, with the technical aspects of ground radio maintenance making up a majority of their job time. Some task differences can be found in Table 24, however; Table 24 reveals that a number of tasks related to ground radio equipment maintenance, such as isolating malfunctions in tube type AM receivers, performing PMIs on facsimile equipment, or electrically aligning recorders or reproducers are performed by slightly higher percentages of overseas incumbents.

Table 25 provides various background data for both DAFSC 30454 CONUS and overseas respondents, and highlights some additional similarities and differences between these two groups. DAFSC 30454 overseas personnel are more senior (72 months versus 58 months TAFMS) and perform a higher average number of tasks (106 versus 89) than CONUS respondents. When examining the equipment maintained by both groups, the AN/GRC-171 and AN/GRC-175 are maintained by substantially higher percentages of CONUS personnel, while the 208U-3 and R-390A are maintained by slightly higher percentages of overseas incumbents. A review of the job satisfaction data presented in Table 25 reveals that a slightly lower percentage of overseas personnel find their job interesting (64 versus 70 percent) while a slightly higher percentage plans to reenlist (54 versus 45 percent).

TABLE 24

REPRESENTATIVE TASKS WHICH BEST DIFFERENTIATE DAFSC 30454 CONUS AND
OVERSEAS PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	CONUS PERSONNEL (N=574)	OVERSEAS PERSONNEL (N=342)	DIFFERENCE
ALIGN TRANSCEIVERS	45	35	+10
CONFIGURE PATCH PANELS FOR RADIO FREQUENCY (RF) OPERATIONS	19	30	-11
ISOLATE MALFUNCTIONS IN TUBE TYPE HF MIXERS	15	26	-11
ISOLATE MALFUNCTIONS IN SOLID STATE SIDEBAND RECEIVERS	15	26	-11
ALIGN SIDEBAND RECEIVERS	39	50	-11
ADJUST AMPLITUDE OR LINE EQUALIZER COMPONENTS	20	32	-12
PERFORM PMIs ON RECORDERS OR REPRODUCERS	29	41	-12
ISOLATE MALFUNCTIONS IN TUBE TYPE AM DETECTORS	15	27	-12
ADJUST HIGH FREQUENCY (HF) MIXER COMPONENTS	24	36	-12
ISOLATE MALFUNCTIONS IN SOLID STATE AGCs	36	48	-12
REMOVE OR REPLACE MECHANICAL COMPONENTS	48	61	-13
ISOLATE MALFUNCTIONS IN PATCH PANELS	30	43	-13
ADJUST GENERAL PURPOSE POWER SUPPLY COMPONENTS	23	36	-13
PREPARE REQUISITIONS FOR TOOLS, PARTS, OR SUPPLIES	37	50	-13
SECURE CLASSIFIED MATERIALS	9	22	-13
ADJUST AUDIO AMPLIFIER COMPONENTS	47	60	-13
ELECTRICALLY ALIGN RECORDERS OR REPRODUCERS	24	38	-14
ADJUST HF RECEIVE RF AMPLIFIER COMPONENTS	45	59	-14
ISOLATE MALFUNCTIONS IN HF SOLID STATE RECEIVE RF AMPLIFIERS	18	33	-15
ISOLATE MALFUNCTIONS IN FACSIMILE EQUIPMENT	5	20	-15
PREPARE NONREPARABLE OR REPARABLE ITEMS FOR TURN-IN	48	63	-15
ADJUST FACSIMILE EQUIPMENT COMPONENTS	4	20	-16
PERFORM PMIs ON FACSIMILE EQUIPMENT	5	21	-16
REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICROMINIATURE COMPONENTS USING METHODS OTHER THAN SOLDERING	34	50	-16
ISOLATE MALFUNCTIONS IN HF TUBE TYPE RECEIVE RF AMPLIFIERS	35	52	-17
PAINT EQUIPMENT OR FACILITIES	44	61	-17
ISOLATE MALFUNCTIONS IN TUBE TYPE AM RECEIVERS	24	41	-17
ISOLATE MALFUNCTIONS IN TUBE TYPE RECEIVE IF AMPLIFIERS	25	42	-17
ISOLATE MALFUNCTIONS IN TUBE TYPE AGCs	22	39	-17

TABLE 25

JOB SATISFACTION AND BACKGROUND INFORMATION FOR
DAFSC 30454 CONUS AND OVERSEAS GROUPS

	CONUS PERSONNEL (N=574)	OVERSEAS PERSONNEL (N=342)
AVERAGE NUMBER OF TASKS PERFORMED:	89	106
AVERAGE MONTHS TAFMS:	58	72
PERCENT FINDING THEIR JOB INTERESTING:	70%	64%
PERCENT PERCEIVING THEIR TALENTS ARE UTILIZED AT LEAST FAIRLY WELL:	76%	73%
PERCENT PERCEIVING THEIR TRAINING IS UTILIZED AT LEAST FAIRLY WELL:	75%	76%
PERCENT PLANNING TO REENLIST:	45%	54%
PERCENT PRESENTLY ON A CONUS ISOLATED/OVERSEAS REMOTE ASSIGNMENT:	5%	12%
PERCENT MAINTAINING EQUIPMENT USING MICROPROCESSOR TECHNOLOGY:	18%	29%
PERCENT WORKING IN THE FOLLOWING AREAS:		
CONTROL TOWER	16%	15%
MAINTENANCE TEAMS	11%	11%
MISSILE RADIO WORKCENTER	9%	2%
RECEIVER SITE (FIXED)	21%	24%
TRANSCEIVER SITE (FIXED)	8%	16%
TRANSMITTER SITE (FIXED)	25%	20%
PERCENT MAINTAINING THE FOLLOWING HF/SSB/ISB EQUIPMENT:		
51S-1	5%	15%
208U-3	6%	15%
FRC-153	28%	23%
KWM-2/2A	33%	32%
R-390A	20%	33%
PERCENT MAINTAINING THE FOLLOWING VHF/UHF EQUIPMENT:		
AN/GRC-171	45%	32%
AN/GRC-175	33%	21%
AN/GRR-23	28%	23%
AN/GRR-24	42%	37%
AN/GRR-25	21%	13%
AN/GRT-21	33%	26%
AN/GRT-22	42%	34%

ANALYSIS OF MAJOR COMMAND DIFFERENCES

An analysis of the tasks and duties performed by first enlistment (1-48 months TAFMS) MAJCOM groups can provide additional insight to management and training personnel as to the different training requirements for various MAJCOM personnel. In many specialties, the jobs performed by first-term personnel varies little across MAJCOMs; however, this is not the case with the 304X4 specialty. The five largest users of 304X4 personnel (AFCC, ATC, ESC, TAC, and MAC) were examined, and all five MAJCOMs had personnel performing different tasks or maintaining different ground radio systems. In other words, the jobs performed by first enlistment personnel in the 304X4 specialty does vary depending upon the MAJCOM assigned.

Given below are brief narrative job descriptions concerning the five MAJCOMs mentioned above. In addition, four tables at the end of this section provide various types of task and background data for each of the five MAJCOMs, and can be extremely useful when comparing first enlistment MAJCOM personnel with each other. For an overall view of how the jobs vary among MAJCOM groups, Table 26 reveals the relative percent of job time spent performing various duties. For example, Table 26 reveals ATC personnel spend 36 percent of their time performing training type functions, while ESC first-termers spend 12 percent of their time performing equipment operation functions. Table 27 reveals more specific differences between first enlistment MAJCOM groups by listing the tasks which best differentiate MAJCOM groups. For example, mobility or solid state tasks differentiate TAC first-termers, with higher percentages of these incumbents performing these types of tasks than other MAJCOM groups. Table 28 reveals various types of background differences, such as equipment maintained, work area, or average number of tasks performed for the MAJCOM groups. Table 28 reveals that 40 percent of ESC personnel work at a receiver site, while 14 percent of TAC first-termers are working at a mobile transmitter unit. Finally, Table 29 provides various types of job satisfaction data for first-term MAJCOM personnel, such as job interest, reenlistment intentions, etc. Based on Table 29 it appears that overall, ATC personnel are the most satisfied and TAC personnel are the least satisfied with their job.

ATC

The 10 first enlistment personnel assigned to this MAJCOM are conducting various aspects of resident course classroom training, with 70 percent possessing the "T" prefix. As expected, these incumbents spend a large amount of job time performing training type tasks (36 percent), which in addition are the types of tasks which best differentiate these incumbents (see Table 27). Examples of these differentiating tasks include scoring tests, evaluating progress of students, and counseling trainees on training progress. Table 28 reveals that all of these incumbents are stationed in the CONUS, and fairly low percentages of these first-termers report maintaining any type of ground radio equipment. A review of job satisfaction indicators reveals that these first enlistment personnel are among the most satisfied, with 80 percent finding their job interesting and 50 percent planning to reenlist.

TAC

The 57 first enlistment personnel assigned to this MAJCOM are primarily working in tactical communications units or Combat Communications Groups. These personnel are responsible for setting up and maintaining the mobile ground radios and related equipment associated with these types of units. Table 27 reveals that the tasks which best differentiate these incumbents are primarily mobility in nature, and include levelling shelters or vans, constructing facilities to support field activities, and installing or removing cabling between site vans. Some of the types of equipment maintained by these incumbents include the KWM-2/2A, AN/GRC-171, AN/GRR-24, AN/GRT-21, and AN/TSC-60(V) 1/2 (Table 28). Finally, Table 29 reveals that these incumbents are somewhat dissatisfied with their job, with only 68 percent finding their job interesting and only 28 percent planning to reenlist. These low job satisfaction indicators are probably due to the fact that these incumbents, being associated with mobile communications units, spend a lot of time TDY. In addition, when they are not TDY participating in an exercise, they do not have much of a job to perform.

ESC

The 15 first-termers assigned to this command spend 23 percent of their job time maintaining receivers, which is a higher percentage than all other MAJCOM groups. In addition, ESC personnel spend less than one percent of their time maintaining transmitters, which is substantially less time than other MAJCOM groups. The primary mission of respondents involves monitoring communications and determining the source of the communication. Consequently, these incumbents maintain a different type of a receiver, the AN/FLR-9, which is only utilized by ESC personnel. Most of the differentiating tasks performed by these incumbents involve security or receiver maintenance, such as establishing secure voice links, performing PMIs on FM receivers, or setting up encoding or decoding equipment. A review of job satisfaction data reveals these incumbents are also fairly dissatisfied, with only 66 percent finding their job interesting and only 27 percent planning to reenlist.

AFCC

As expected, a majority of 304X4 first-termers are assigned to this MAJCOM, with these incumbents spending the highest percentages of job time maintaining receivers or transmitters. While these incumbents maintain a number of different ground radio systems, the tasks which best differentiate these first-termers involve air traffic control radio systems. Examples of tasks which best differentiate these personnel include performing PMIs on air traffic control consoles, adjusting the console components, or adjusting the console light gun components. Table 28 reveals that AFCC first-termers perform the highest average number of tasks (87), are located in a variety of work areas (i.e., control towers, fixed receiver sites, etc.), and maintain a variety of HF/SSB/ISB, VHF/UHF, and weather equipment. A review of job satisfaction data reveals these personnel are fairly satisfied with their job, with 75 percent finding their job interesting and 40 percent planning to reenlist.

MAC

A small group of first enlistment personnel (23) reported being assigned to this MAJCOM. Table 26 reveals these incumbents spend 30 percent of their job time maintaining receivers and transmitters, and Table 28 reveals these personnel maintain a variety of ground radio equipment. The tasks which best distinguish these incumbents from other first-termers are those which involve intercoms, recorders, or reproducers, such as electrically aligning recorders or reproducers, isolating malfunctions in intercom systems, or isolating malfunctions in hotline assemblies. MAC first-termers appear to be fairly satisfied with their job, with 82 percent finding their job interesting and 83 percent perceiving their talents are being utilized at least fairly well.

Summary

The jobs performed by 304X4 first enlistment personnel can vary considerably depending on the MAJCOM assigned. Five of the biggest users of 304X4 personnel (ATC, TAC, ESC, AFCC, and MAC) were examined, and all five MAJCOM groups were found to be performing distinguishing tasks and in some cases maintaining different equipment. ATC first-termers seem to be responsible for various aspects of resident course classroom training. TAC personnel maintain the mobile ground radio equipment found in tactical communications units and Combat Communications Groups. ESC first-termers maintain receivers used to detect and monitor communications. AFCC first enlistment personnel maintain a wide variety of ground radio equipment, but tasks involving air traffic control systems best differentiate these personnel. MAC personnel seem to be different due to the maintenance they perform on intercoms, hotlines, recorders, and reproducers. Overall, ATC personnel are the most satisfied, TAC and ESC first-termers the least satisfied, and AFCC and MAC personnel falling somewhere in between.

TABLE 26

RELATIVE PERCENT TIME SPENT ON DUTIES BY FIRST-TERM MAJOR COMMAND GROUPS

DUTIES	ATC (N=10)	TAC (N=57)	ESC (N=15)	AFCC (N=444)	MAC (N=23)
ORGANIZING AND PLANNING	1	1	1	3	7
DIRECTING AND IMPLEMENTING	10	3	*	2	2
INSPECTING AND EVALUATING	4	*	*	*	*
TRAINING	36	3	*	2	3
PREPARING AND MAINTAINING FORMS, RECORDS, AND REPORTS	2	4	1	5	4
PERFORMING SUPPLY FUNCTIONS	2	3	3	3	4
PERFORMING EQUIPMENT OPERATION FUNCTIONS	12	8	12	7	8
PERFORMING SATELLITE OPERATION FUNCTIONS	*	*	*	*	*
PERFORMING GENERAL MAINTENANCE FUNCTIONS	6	13	19	13	13
MAINTAINING ANTENNA SYSTEMS	*	3	*	1	3
MAINTAINING RECEIVERS TO INCLUDE RECEIVE PORTION OF TRANSCEIVERS	6	20	23	16	14
MAINTAINING TRANSMITTERS TO INCLUDE TRANSMIT PORTION OF TRANSCEIVERS	8	20	*	16	16
MAINTAINING VOICE FREQUENCY MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	1
MAINTAINING TELETYPE MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	*
MAINTAINING COMMUNICATION OR CONTROL CONSOLES	4	*	*	4	1
MAINTAINING AUDIO OR FACSIMILE EQUIPMENT	2	*	6	4	*
MAINTAINING SCOPE CONTROL OR UNIVERSAL RADIO GROUP EQUIPMENT	*	*	*	1	3
MAINTAINING MODEMS	*	*	*	*	*
MAINTAINING TRACKING SYSTEMS	*	*	*	*	*
MAINTAINING BASE AND INSTALLATION SECURITY SYSTEMS	*	*	*	*	*
MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES	4	10	20	10	9
PERFORMING SITE INSTALLATION OR MOVING FUNCTIONS	*	4	2	3	2
PERFORMING SUPPORT FUNCTIONS	3	8	11	6	10

*DENOTES LESS THAN ONE PERCENT

TABLE 27

REPRESENTATIVE TASKS WHICH BEST DIFFERENTIATE FIRST-TERM MAJOR COMMAND GROUPS
(PERCENT MEMBERS PERFORMING)

TASKS	ATC	TAC	ESC	AFCC	MAC
D86 ADMINISTER TESTS	70	5	4	2	-
D93 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	60	4	4	2	-
D96 COUNSEL TRAINEES ON TRAINING PROGRESS	50	9	4	7	-
D105 EVALUATE PROGRESS OF STUDENTS	70	5	4	4	3
D109 SCORE TESTS	70	2	4	2	-
K303 ISOLATE MALFUNCTIONS IN SOLID STATE AM RECEIVERS	20	63	46	47	53
V816 EMPLACE OR ANCHOR EQUIPMENT VANS OR SHELTERS	-	26	4	7	-
V818 INSTALL OR REMOVE CABLING BETWEEN SITE VANS	-	32	-	6	-
V829 LEVEL SHELTERS OR VANS	-	28	4	6	-
W838 CONSTRUCT FACILITIES TO SUPPORT FIELD ACTIVITIES	-	21	9	5	-
W859 PERFORM SITE SECURITY DUTIES	-	40	9	19	20
G153 ESTABLISH SECURE VOICE LINKS	-	8	30	1	-
G167 SET UP ENCODING OR DECODING EQUIPMENT	10	5	30	6	9
K335 PERFORM PMIs ON FM RECEIVERS	-	32	57	11	27
K336 PERFORM PMIs ON SIDEBAND RECEIVERS	10	32	61	43	13
L414 PERFORM PMIs ON FM VHF TRANSMITTERS OR EXCITERS	-	21	52	8	-
0481 ADJUST AIR TRAFFIC CONTROL CONSOLE COMPONENTS	30	4	4	38	-
0482 ADJUST AIR TRAFFIC CONTROL CONSOLE LIGHT GUN COMPONENTS	30	5	13	38	-
0483 ADJUST AIR TRAFFIC CONTROL CONSOLE RECEIVER CONTROL CIRCUIT COMPONENTS	30	2	4	36	-
0495 ADJUST MICROPHONE AMPLIFIER CIRCUIT COMPONENTS	20	4	4	30	7
0504 ISOLATE MALFUNCTIONS IN ATC CONSOLES	30	2	4	34	4
0523 PERFORM PMIs ON ATC CONSOLES	10	-	-	28	-
P540 ADJUST RECORDER OR REPRODUCER SUBASSEMBLIES OR COMPONENTS	20	11	9	37	53
P541 ELECTRICALLY ALIGN RECORDERS OR REPRODUCERS	30	9	9	30	53
P543 ISOLATE MALFUNCTIONS IN HOTLINE ASSEMBLIES	10	2	-	4	20
P544 ISOLATE MALFUNCTIONS IN INTERCOM SYSTEMS	10	2	4	13	27
P547 MECHANICALLY ALIGN RECORDERS OR REPRODUCERS	20	7	4	32	47
P550 PERFORM PMIs ON INTERCOM SYSTEMS	10	2	4	7	33

TABLE 28

BACKGROUND INFORMATION FOR FIRST-TERM MAJOR COMMAND PERSONNEL

	<u>ATC</u>	<u>TAC</u>	<u>AFCC</u>	<u>MAC</u>	<u>ESC</u>
AVERAGE NUMBER OF TASKS PERFORMED:	39	79	87	73	63
PERCENT WITH "T" DUTY AFSC PREFIX:	70%	-	-	-	-
PERCENT LOCATED OVERSEAS:	-	11%	21%	22%	87%
PERCENT MAINTAINING EQUIPMENT WHICH USES MICROPROCESSOR TECHNOLOGY:	20%	26%	16%	4%	20%

PERCENT WORKING AT THE FOLLOWING AREAS:

CONTROL TOWER	-	-	21%	4%	-
MAINTENANCE TEAMS	-	16%	11%	30%	33%
MISSILE RADIO WORKCENTER	-	-	13%	4%	-
RECEIVER SITE (FIXED)	10%	23%	24%	4%	40%
TRAINING UNIT (TECH SCHOOL)	40%	-	1%	-	-
TRANSCEIVER SITE (MOBILE)	-	18%	6%	4%	-
TRANSMITTER SITE (FIXED)	30%	23%	28%	9%	-
TRANSMITTER SITE (MOBILE)	-	14%	2%	4%	-

PERCENT MAINTAINING THE FOLLOWING TYPES OF EQUIPMENT:

HF/SSB/ISB EQUIPMENT

618-T1	-	26%	3%	39%	-
FRC-153	-	30%	32%	4%	-
KWM-2/2A	10%	39%	39%	4%	-
R-390A	10%	2%	27%	30%	40%
OTHER	-	14%	9%	57%	13%

VHF/UHF EQUIPMENT

AN/GRC-171	30%	72%	53%	9%	-
AN/GRC-175	30%	19%	43%	13%	-
AN/GRR-23	10%	19%	36%	4%	-
AN/GRR-24	30%	63%	49%	13%	7%
AN/GRR-25	30%	2%	28%	9%	-
AN/GRT-21	30%	19%	44%	4%	-
AN/GRT-22	30%	67%	49%	8%	-
OTHER	-	18%	7%	65%	27%

TRANSPORTABLE GROUND RADIO EQUIPMENT

AN/MRC-107	-	16%	3%	74%	-
AN/TSC-60(V) 1/2	-	11%	4%	-	-

MISSILE/WEATHER EQUIPMENT

AN/FRR-75/76/77/78	10%	-	10%	-	-
DL-19W	10%	4%	14%	-	7%
R-2174/R-390A	10%	-	11%	13%	20%

TABLE 29

JOB SATISFACTION AND RELATED DATA FOR FIRST-TERM MAJOR COMMAND GROUPS
(PERCENT MEMBERS RESPONDING)

	<u>ATC</u>	<u>TAC</u>	<u>AFCC</u>	<u>MAC</u>	<u>ESC</u>
<u>I FIND MY JOB:</u>					
DULL	20	14	7	9	7
SO-SO	-	18	18	9	27
INTERESTING	80	68	75	82	66
<u>MY JOB UTILIZES MY TALENTS:</u>					
NOT AT ALL TO VERY LITTLE	20	33	21	17	13
FAIRLY WELL OR BETTER	80	67	79	83	87
<u>MY JOB UTILIZES MY TRAINING:</u>					
NOT AT ALL TO VERY LITTLE	-	28	20	48	27
FAIRLY WELL OR BETTER	90	72	79	52	73
<u>I PLAN TO REENLIST:</u>					
NO, PLANNING TO RETIRE	-	-	-	-	-
NO OR PROBABLY NO	40	72	59	65	73
YES OR PROBABLY YES	50	28	40	35	27

NOTE: COLUMNS MAY NOT ADD TO 100 PERCENT DUE TO "NO RESPONSE"

TRAINING ANALYSIS

Occupational survey data is just one of the many sources of information which can be used to help make training programs more meaningful and relevant to students. Factors provided in occupational surveys which may be used in evaluating training are the percentage of first enlistment personnel performing tasks, percentage of first enlistment personnel maintaining equipment, percentage of first enlistment personnel utilizing test equipment, percentage of first enlistment personnel utilizing electronic principles, and task difficulty ratings. These factors can be used in evaluating the Specialty Training Standard (STS) for the 304X4 specialty. Technical school personnel at the Keesler Technical Training Center matched inventory tasks to areas of instruction outlined in the STS, dated August 1979. A complete computer listing of the percent members performing and task difficulty ratings for each task along with the matching STS paragraph and subparagraph has been forwarded to technical school and MAJCOM training personnel for their use in reviewing training documents. A summary of that information is described below.

Analysis of Task Difficulty

The relative difficulty of each task in the job inventory was assessed through ratings by 50 experienced 7- and 9-skill level Ground Radio Communications NCOs. These tasks were processed to produce an ordered listing of all tasks in terms of their relative difficulty and were standardized to have an average difficulty of 5.0 (68 percent of all 863 tasks have ratings between 4.0 and 6.0). This task difficulty task listing is somewhat different than the task listing presented in this section of AFPT 90-304-422, Volume I. The task difficulty analysis in this report uses only the ratings from 304X4 task difficulty raters, while the AFPT 90-304-422 Volume I task difficulty analysis utilizes the combined ratings from the personnel in three specialties (AFSS 304X0, 304X4 and 304X6). Because the personnel in different specialties may view the difficulty of tasks somewhat differently, it is important to use only specialty-specific raters when analyzing specialty documents, such as the STS. Therefore, the analysis of task difficulty and that of the STS will only use the ratings of 304X4 personnel. (For a more complete description of these ratings, see the Task Factor Administration section in the INTRODUCTION).

In order to help insure that the 304X4 raters reflect the same perceptions as the rest of the career ladder concerning task difficulty, it is necessary that a representative sample of task difficulty raters be obtained. Table 30 reveals the major command distribution of the task difficulty raters versus the same distribution of all the personnel assigned to the 304X4 specialty, and reveals a representative sample of task difficulty raters was obtained. Having a representative sample is extremely important, especially when the personnel in different major commands utilize or maintain different types of equipment, because a large overrepresentation of one major command may lead to spurious task difficulty ratings. This was not the case with the 304X4 task difficulty ratings.

Table 31 lists the tasks rated the most difficult by 304X4 task difficulty raters. Almost all of these tasks involve supervision or the isolation of malfunctions in specific pieces of equipment, particularly Universal Radio Group (URG) type equipment. Examples of these most difficult tasks include isolating malfunctions in URG automatic switchboards, isolating malfunctions in URG data bypass equipment, or drafting budget or financial requirements. Overall, very few of either 304X4 first enlistment or 304X4 total sample personnel perform those tasks rated the most difficult. However, even though the percentages are low, about equal percentages of first enlistment and total sample personnel are performing the maintenance tasks rated above average in difficulty.

Most of the tasks rated about average in difficulty are also maintenance oriented, but seem to involve the adjusting of equipment rather than isolating malfunctions in equipment (see Table 32). Some of these tasks rated about average in difficulty include adjusting UHF power amplifier components, adjusting preselector components, or aligning AM receivers. Generally, a greater percentage of both all 304X4 and 304X4 first enlistment personnel perform these tasks rated average in difficulty than those rated high in difficulty.

Table 33 lists the tasks rated the least difficult by senior 304X4 personnel. Generally, these tasks involve routine maintenance, administrative functions, or aspects of tactical communications. Examples of these relatively easy tasks include clearing mobility work areas, painting equipment or facilities, or removing or replacing desiccants. As expected, many of the tasks rated the least difficult are performed by high percentages of first-termers and total sample personnel.

Analysis of the Specialty Training Standard

The 304X4 Specialty Training Standard (STS), dated August 1979, was reviewed for first enlistment (1-48 months TAFMS) and 5- and 7-skill level Ground Radio Communications personnel. Subject matter specialists at the Keesler Technical Training Center assisted in the analysis by matching job inventory tasks to specific paragraphs in the STS. Each paragraph in the STS was then analyzed using task difficulty and percent members performing vectors to determine if the paragraph had job inventory justification for being in the STS. For the 304X4 specialty, the STS was found to give a broad overview of the career ladder, and all STS paragraphs appear to be well justified based on occupational data.

TABLE 30

MAJOR COMMAND REPRESENTATION OF 304X4
TASK DIFFICULTY RATERS

<u>MAJOR COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF TASK DIFFICULTY RATERS</u>
AFCC	63	74
ESC	10	4
TAC	9	6
ATC	4	6
OTHER	<u>14</u>	<u>10</u>
TOTAL	100	100

TOTAL NUMBER OF 304X4 TASK DIFFICULTY RATERS = 50

TABLE 31

REPRESENTATIVE TASKS RATED THE MOST DIFFICULT BY DAFSC 304X4 RATERS

TASK	TASK DIFFICULTY	PERCENT OF FIRST ENLISTMENT PERSONNEL PERFORMING (N=605)	PERCENT OF DAFSC 304X4 PERSONNEL PERFORMING (N=1,618)
A8 DRAFT BUDGET OR FINANCIAL REQUIREMENTS	7.89	1.7	7.8
H172 DETERMINE SPACECRAFT OPERATIONAL READINESS	7.35	.5	.7
Q578 ISOLATE MALFUNCTIONS IN URG AUTOMATIC SWITCHBOARDS	7.28	2.6	3.2
Q587 ISOLATE MALFUNCTIONS IN URG STATUS DISPLAY ENCODER/TRANSMITTERS	7.23	4.3	5.5
I197 ISOLATE MALFUNCTIONS IN AFSATCOM PECULIAR TEST EQUIPMENT	7.13	.8	.6
A14 ESTABLISH UNIT MANPOWER REQUIREMENTS	7.01	1.7	4.0
Q580 ISOLATE MALFUNCTIONS IN URG DATA BYPASS EQUIPMENT	7.00	4.8	5.9
Q584 ISOLATE MALFUNCTIONS IN URG MODEM SELECTORS	7.00	1.8	2.3
S628 ISOLATE MALFUNCTIONS IN TRACKING SERVO CONTROLS	6.97	.5	.7
Q588 ISOLATE MALFUNCTIONS IN URG STATUS DISPLAY READOUTS	6.94	5.3	6.1
U767 ISOLATE MALFUNCTIONS IN SOLID STATE SYNTHESIZERS	6.90	15.5	14.2
Q586 ISOLATE MALFUNCTIONS IN URG REMOTE CONTROL EQUIPMENT	6.89	5.6	6.5
C85 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	6.85	1.8	9.3
D101 DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS			
Q581 ISOLATE MALFUNCTIONS IN URG DIAL PULSE CONTROLS	6.81	1.0	2.0
B52 SUPERVISE CIVILIAN PERSONNEL	6.78	6.1	6.4
U740 ISOLATE MALFUNCTIONS IN DIGITAL PRINTERS	6.74	1.2	5.1
Q589 ISOLATE MALFUNCTIONS IN URG TIMING DRAWERS	6.74	2.8	3.2
C63 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS	6.74	2.0	2.3
Q577 ISOLATE MALFUNCTIONS IN URG ATTENDANT DRAWERS	6.74	.8	6.4
Q573 ISOLATE MALFUNCTIONS IN DIALED FREQUENCY REGISTERS	6.70	2.1	2.9
C84 WRITE CIVILIAN PERFORMANCE RATINGS OR SUPERVISORY APPRAISALS	6.69	3.8	5.7
Q576 ISOLATE MALFUNCTIONS IN SITE SEIZING EQUIPMENT	6.68	.7	3.4
T675 ISOLATE MALFUNCTIONS IN SECURITY SYSTEM MICROCOMPUTER CONTROL/CONVERTER ASSEMBLIES		1.0	1.7
T679 ISOLATE MALFUNCTIONS IN SECURITY SYSTEM SENSOR MULTIPLEXERS	6.62	.5	.6
O518 ISOLATE MALFUNCTIONS IN SATELLITE CONTROL CONSOLES	6.60	.8	.7
S624 ISOLATE MALFUNCTIONS IN FERRITE SCANNERS	6.58	.3	.4
S625 ISOLATE MALFUNCTIONS IN MAGIC T NETWORKS	6.58	.3	.5
S626 ISOLATE MALFUNCTIONS IN TRACKING DOWN CONVERTERS	6.58	.3	.4
		.3	.6

TABLE 32

REPRESENTATIVE TASKS RATED ABOUT AVERAGE IN DIFFICULTY BY DAFSC 304X4 PERSONNEL

TASK	TASK DIFFICULTY	PERCENT OF FIRST ENLISTMENT PERSONNEL PERFORMING (N=605)	PERCENT OF DAFSC 304X4 PERSONNEL PERFORMING (N=1,618)
T684 ISOLATE MALFUNCTIONS IN SECURITY SYSTEM TELEVISION VIDEO AMPLIFIERS	5.07	.3	.6
M423 ADJUST OUT-OF-BAND SIGNALING AND CONTROL CIRCUIT COMPONENTS	5.06	.8	.9
U785 ISOLATE MALFUNCTIONS IN TUBE TYPE PILOT TONE OSCILLATORS	5.06	1.0	1.2
J250 ISOLATE MALFUNCTIONS IN DIPLXERS OR DUPLXERS	5.06	1.3	1.1
O527 PERFORM PMIs ON COMMANDO ESCORT CONSOLES	5.05	1.2	1.3
J318 ISOLATE MALFUNCTIONS IN TUBE TYPE AM RECEIVERS	5.05	24.8	25.5
A17 PLAN SAFETY PROGRAMS	5.04	4.5	13.4
N467 ADJUST TELETYPE MULTIPLEXER COMPONENTS	5.04	2.1	2.7
L355 ADJUST ULTRA HIGH FREQUENCY (UHF) POWER AMPLIFIER COMPONENTS	5.03	48.9	37.6
U726 ADJUST ULTRA HIGH FREQUENCY (UHF) MIXER COMPONENTS	5.03	29.1	22.7
T656 ADJUST SECURITY SYSTEM VOICE COMMUNICATION SYSTEM COMPONENTS	5.02	.5	.6
O508 ISOLATE MALFUNCTIONS IN AUTODIN MONITOR TEST CONSOLES	5.02	.5	.4
K282 ADJUST PRESELECTION COMPONENTS	5.02	31.2	22.8
J245 ISOLATE MALFUNCTIONS IN ANTENNA SELECT CIRCUITS	5.01	11.7	11.9
U727 ADJUST VERY HIGH FREQUENCY (VHF) MIXER COMPONENTS	5.01	23.5	18.0
B57 SUPERVISE RADIO RELAY EQUIPMENT (WIDEBAND COMMUNICATIONS EQUIPMENT) TECHNICIANS (AFSC 30470)	5.01	.7	2.4
N465 ADJUST HUBBING OR MULTIPARTY EQUIPMENT COMPONENTS	5.00	.3	.7
T652 ADJUST SECURITY SYSTEM TELEVISION CAMERA COMPONENTS	5.00	.3	.7
T653 ADJUST SECURITY SYSTEM TELEVISION MONITOR COMPONENTS	5.00	.3	.6
K291 ALIGN AM RECEIVERS	4.99	57.5	47.8
T648 ADJUST SECURITY SYSTEM SEISMIC SENSOR SYSTEM COMPONENTS	4.99	.3	.5

TABLE 33

REPRESENTATIVE TASKS RATED THE LEAST DIFFICULT BY DAFSC 304X4 PERSONNEL

TASK	TASK DIFFICULTY	PERCENT OF FIRST ENLISTMENT PERSONNEL PERFORMING (N=605)	PERCENT OF DAFSC 304X4 PERSONNEL PERFORMING (N=1,618)
W859 PERFORM SITE SECURITY DUTIES	2.82	21.5	18.9
D86 ADMINISTER TESTS	2.82	3.6	8.9
W858 PERFORM OPERATOR MAINTENANCE ON POWERED VEHICLES	2.81	19.5	19.8
G166 RUN TEST TAPES	2.77	25.6	22.4
W815 CONSTRUCT WALKWAYS FOR SITES	2.77	2.5	2.2
W841 MAINTAIN HOUSEHOLD AIR LINES	2.76	1.0	1.2
W814 CONSTRUCT VEHICLE PASSAGES TO PROPOSED SITES	2.74	2.1	1.7
W854 PERFORM OPERATOR MAINTENANCE ON GROUND SUPPORT EQUIPMENT			
W842 MAINTAIN HOUSEHOLD FUEL LINES	2.72	14.5	15.0
V833 SKIRT BUILDINGS	2.66	1.2	1.2
V831 LOAD OR UNLOAD SUPPORT EQUIPMENT ON SHIPS	2.65	.7	.7
V834 SKIRT VANS	2.60	.7	1.1
A25 SCHEDULE LEAVES OR PASSES	2.60	.5	1.0
W839 LUBRICATE VAN OR TRAILER CHASSIS	2.53	4.3	22.2
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	2.51	6.1	5.3
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	2.51	74.9	63.3
F138 MAINTAIN OFFICE SUPPLIES	2.38	55.0	51.4
V813 CONSTRUCT SITE LATRINES	2.33	4.3	17.6
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	2.28	2.8	2.0
I196 INSTALL OR REMOVE MOUNTING HARDWARE	2.19	72.2	60.4
W840 MAINTAIN DINING AREA EQUIPMENT	2.13	44.3	37.1
V832 LOAD OR UNLOAD SUPPORT EQUIPMENT ON TRAINS	2.09	3.1	2.2
D109 SCORE TESTS	2.04	.5	.8
I192 CRATE OR UNCRATE COMPONENTS OR MODULES	2.04	2.8	7.6
W837 CLEAR MOBILITY WORK AREAS	1.82	42.3	36.3
W853 PAINT EQUIPMENT OR FACILITIES	1.73	12.7	10.3
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	1.71	46.9	43.2
I210 REMOVE OR REPLACE DESICCANTS	1.50	2.6	17.9
W836 CLEAN MAINTENANCE WORK AREAS	1.44	9.8	9.6
	1.29	74.9	61.5

ANALYSIS OF WRITE-IN COMMENTS

Respondents are invited to write in any comments relative to their job in back of their job inventory booklet. In this survey, a fairly small amount of write-in comments addressed a range of career ladder irritants. Generally, these comments involve job control, tactical communications units, training, or assignment dissatisfaction.

Although there have been a number of proposals to create a separate AFSC for job control, none have yet to be implemented. It appears that in the Communications-Electronics career field (30XXX), there would be enough job control slots to justify a separate specialty. The philosophy of sending personnel to fairly lengthy technical schools and then utilizing them in job control may be a tremendous waste of training dollars. In addition, these personnel are typically the least satisfied in the career ladder. Specific comments about job control include:

"I feel that job control should be a separate career ladder for the following reasons. Job controllers in all units I know of have been largely or entirely manned by 304X4 radio maintenance repairmen, who, when it comes to taking their SKT for promotion still have to take the 304X4 radio maintenance test even though they have not worked in their job for the period they have been in job control, which in many cases has been years. It is also wrong in my opinion to take an airman from his job to man job control after all the time and effort that was spent to train him on how that shop operates. Job control is an important part of the unit and should be manned by a crew of properly trained airmen who can be transferred from unit to unit and be ready to perform the job he or she is trained to do. It is not a job that should be manned by airmen being rotated from the maintenance shops on a part time basis or by the unit misfits..."

"...Job control is a waste of money in so far that what a person was trained for, at great expense, he is not proficient at doing...I believe that ground CEM should have a separate AFSC."

"For the most part I have no job and am bored, frustrated, and without any satisfaction or feeling of accomplishment. I am not being used where, or in a method that best suits my talents or desires."

A small number of write-ins expressed concern over assignment policies. These comments are as follows:

"I am retiring because I did not want to go remote from this assignment. I even refused my E-8 promotion because of that fact. 30499s are not allowed to extend past four years in Europe because of AFCC policy. I would have stayed in Germany, if I had been allowed."

"I have spent 11 of the last 14 years in overseas locations, and am still here. This is due to being in ESC, which I would like to get out of."

"This survey is based on present location. My present duty location is unlike any radio maintenance shop. There is no order or AF standards...it is not what you know, but who you know."

Two comments were made referring to tactical communications units. These comments are as follows:

"I joined this career field to become an electrician, not a 9-level grunt. I don't mind working with my hands, but I'd like to be able to use my brains."

"Being in a mobile tactical outfit requires much of our time being spent erecting tents and quarters and camouflaging equipment and sites. Our equipment is always kept at the very best operating conditions and this helps cut down troubleshooting time. We must repaint our vans, shelters, and trucks about two times a year."

Several write-ins expressed a concern over the training received at the resident technical school. These comments are as follows:

"My knowledge of microwave equipment is very poor, as well as my understanding of basic electronics. I am very unhappy in this career field, and feel I could be more of an asset to the AF doing a job I fully understand..."

"...It is my feeling that one should already be well-grounded in the fundamentals by the time he reaches the workcenter. This training more than pays for itself, decreasing equipment downtime and time spent troubleshooting. In order to include more training in electronics fundamentals without an increase in the school's length, you could exclude or minimize the time spent teaching anything extraneous to electronics fundamentals, such as filling out paperwork, performing PMIs, etc..."

"...Having been a student, a worker, a trainer, a NCOIC, an instructor, and an instructor supervisor, I can see that we are not teaching as much electronics as we used to teach. The quality of the graduates from the technical schools is diminished because of this. We need to teach more electronics and more in more depth..."

Although these comments point to some specific irritants in the career ladder, overall, the number of write-in comments was low (roughly one percent). In other words, some of these comments may reflect individual differences rather than the feelings of the total career ladder.

COMPARISON TO PREVIOUS SURVEY

The results of this 304X4 survey were compared to those of a previous Occupational Survey Report, AFPT 90-304-177 dated July 1976. This analysis can help identify changes in the career ladder due to new missions, changing management policies, new operational equipment, etc. Generally, the two studies reported relatively consistent findings, with differences appearing in the following areas:

A thorough analysis of the tasks and jobs performed by first enlistment incumbents reveal no substantial changes have occurred in the types of tasks and jobs performed over the last five years. However, some changes have occurred in the types of equipment maintained and the percentages of first enlistment personnel maintaining the equipment. Table 34 lists the percentages of 1976 and 1981 first-termers maintaining various types of radios and related equipment. The overall trend is that somewhat higher percentages of current first-termers maintain existing ground radio systems, particularly the AN/GRC-171 and AN/FRC-153. However, some pieces of equipment, such as the R-390A and AN/GRA-53/54 can be noted as being maintained by higher percentages of 1976 first-termers. Table 34 also lists the test equipment commonly utilized by 1976 and 1981 first-termers. It appears that no conclusion can be drawn from this table, due to the fact that some test equipment is utilized by higher percentages of 1976 first-termers, while other equipment is utilized by higher percentages of similar 1981 personnel.

Table 35 presents job satisfaction data for both 1976 and 1981 first, second, and career enlistment groups. While the tasks performed by these TAFMS groups have changed little over the last five years, some of the job satisfaction indicators have. Generally, 1981 first-termers appear to be more satisfied with their job, with higher percentages of these incumbents finding their job interesting or perceiving their job utilizes their talents and training than their 1976 counterparts. However, the same trend does not hold true for second-termers. Table 35 reveals that although a higher percentage of 1981 second-termers perceive their job utilizes their training, a substantially lower percentage plans to reenlist. This difference in reenlistment intentions is the largest difference noted on Table 35 for similar 1976 and 1981 TAFMS groups. Finally, Table 35 reveals that overall, slightly lower percentages of 1981 career personnel are satisfied with their job than their 1976 counterparts.

A review of the 304X4 career ladder structure reveals no substantial job changes have occurred in the last five years. Table 36 lists the major job groups identified in 1976 and the equivalent major job groups identified in 1981. The biggest difference seems to occur with the Radio Operators job group identified in 1976. These personnel worked with tactical units and operated the radios associated with these units. The 1981 study, however, reveals that substantially fewer 304X4 personnel are radio operators, but are now primarily maintenance only. However, this 1976 job group is very small (as are the other job groups identified in 1976 and having no corresponding 1981 job group), and these overall differences are minor. In general, the structure of the career ladder has remained relatively stable over the last five years.

TABLE 34

A COMPARISON OF THE EQUIPMENT MAINTAINED AND TEST EQUIPMENT UTILIZED
BY FIRST-ENLISTMENT PERSONNEL IN THE 1976 AND 1981 OSRs

<u>RADIO EQUIPMENT:</u>	<u>PERCENT OF FIRST-TERMERS MAINTAINING</u>	
	<u>1976</u>	<u>1981</u>
AN/GRC-171	2	50
AN/GRR-24	39	47
AN/GRT-22	40	47
AN/GRT-21	21	37
AN/GRC-175	23	36
KWM-2/2A	30	35
AN/GRR-23	15	30
AN/FRC-153	6	29
R-390A	29	23
AN/GRR-25	16	23
AN/GRA-53/54	30	12
DL-19W	-	11
R-2174/R-390A	-	10

<u>TEST EQUIPMENT:</u>	<u>PERCENT OF FIRST-TERMERS MAINTAINING</u>	
	<u>1976</u>	<u>1981</u>
MULTIMETERS	92	93
OSCILLOSCOPES	87	91
RF SIGNAL GENERATORS	-	88
AUDIO FREQUENCY GENERATORS	85	86
VOLTAGE MEASURING EQUIPMENT	88	77
DISTORTION ANALYZERS	52	77
FREQUENCY MEASURING SETS	48	77
POWER SUPPLIES	-	72
TUBE TESTERS	81	70
POWER METERS	69	67
VSWR METERS	-	61
HIGH VOLTAGE PROBES	-	49
SPECTRUM ANALYZERS	40	46
SEMICONDUCTOR TESTERS	-	41
POWER AMPLIFIERS	-	40
FLUTTER METERS	-	32

"-" INDICATES NO DATA COLLECTED

TABLE 35

A COMPARISON OF JOB SATISFACTION DATA FOR VARIOUS ENLISTMENT GROUPS
IN THE 1976 AND 1981 OSRs
(PERCENT MEMBERS RESPONDING)

	FIRST-TERM (1-48 MONTHS TAFMS)		SECOND-TERM (49-96 MONTHS TAFMS)		CAREER (97+ MONTHS TAFMS)	
	1976	1981	1976	1981	1976	1981
FINDS JOB INTERESTING:	63	74	65	65	82	70
UTILIZES TALENTS WELL:	69	78	72	76	86	77
UTILIZES TRAINING WELL:	66	76	65	75	79	72
INTENDS TO REENLIST:	36	36	68	49	70	62

TABLE 36

A COMPARISON OF THE MAJOR JOB GROUPS IDENTIFIED IN THE 1976 AND 1981 OSRs

1976 CLUSTERS AND INDEPENDENT JOB TYPES	1981 CLUSTERS AND INDEPENDENT JOB TYPES
TACTICAL AIR SUPPORT	GROUND RADIO MAINTENANCE PERSONNEL
MISSILE COMMUNICATIONS EQUIPMENT	TITAN RADIO REPAIRMEN
AIR TRAFFIC CONTROL EQUIPMENT	SR RADIO REPAIRMEN GROUND RADIO MAINTENANCE PERSONNEL JR GROUND RADIO MAINTENANCE PERSONNEL
SAC A & B NET	AERONAUTICAL STATION AND GIANT TALK EQUIPMENT PERSONNEL
MOBILE VAN EQUIPMENT	GROUND RADIO MAINTENANCE PERSONNEL
487L/LF/HF	GROUND RADIO MAINTENANCE PERSONNEL
SECURITY SERVICE	ELECTRONIC SECURITY PERSONNEL
SUPERVISORS	FIRSTLINE MAINTENANCE SUPERVISORS RADIO MAINTENANCE SUPERVISORS RESIDENT TRAINING SUPERVISORS TOOL CRIB SUPERVISORS NCOICs, JOB CONTROL
QUALITY CONTROL	QUALITY CONTROL PERSONNEL LIMITED EXPERIENCE QC PERSONNEL
TEST EQUIPMENT CLERK	--
RADIO TYPE MAINTENANCE NETWORK	--
INSTRUCTORS	RESIDENT TECHNICAL SCHOOL INSTRUCTORS INSTRUCTORS AND MAINTENANCE PERSONNEL
RADIO OPERATORS	--
MAINTENANCE PLANS & SCHEDULING	PLANS AND SCHEDULING PERSONNEL JOB CONTROLLERS SUPPLY PERSONNEL
INSTALLATION	E & I PERSONNEL FIXED E & I PERSONNEL
PA/INTERCOM SYSTEMS INSTALLATION AND MAINTENANCE	COMMUNICATIONS-ELECTRONICS PERSONNEL PUBLIC ADDRESS EQUIPMENT PERSONNEL

IMPLICATIONS

The Ground Radio Communications career ladder is fairly heterogeneous, with a wide variety of jobs performed by 304X4 personnel. The technical radio maintenance jobs are fairly diverse, which is primarily due to the different types of ground radio equipment maintained or installed by these incumbents. In addition, the nontechnical jobs performed by these respondents also differ considerably, ranging from job control to supervisors to instructors. As expected, most of the personnel in the nontechnical jobs are more senior, having a higher paygrade and higher average of months TAFMS than the personnel performing primarily radio maintenance or installation functions.

The career ladder has remained relatively stable over the last few years, and no drastic changes are foreseen in the near future, with the career ladder expected to remain fairly diverse. An interesting issue concerning the career ladder is the fact that similar percentages of first-termers are performing many of the tasks rated the most difficult in the job inventory. In addition, higher percentages of 1981 first-termers are maintaining the more common types of ground radios than their 1976 counterparts. These two factors tend to indicate that 304X4 first-termers are pulling more of a maintenance load than ever before, and resident technical school training and OJT personnel should recognize this and make adjustments for this trend. However, a complicating factor concerning OJT is the fact that substantially lower percentages of second-termers and career personnel are planning to reenlist than in the past, and the availability of these personnel to perform OJT functions may be somewhat more restricted than it is now.

A review of job satisfaction data reveals some interesting trends. When examining the job satisfaction data for major job groups, in most cases personnel performing an E & I or job control related job appear to be among the most dissatisfied. This trend can be noted for almost all of the specialties in the 30XXX career field, and is probably due to the fact that these two types of jobs are not quite what an individual entering the 30XXX career field expected.

APPENDIX A

Job Type Descriptions

Listed below are brief descriptions of the job types identified in the Ground Radio Communication CAREER LADDER STRUCTURE section. Generally, the clusters all appear to be fairly heterogeneous, with a variety of related jobs identified in each cluster. As with the CAREER LADDER STRUCTURE section, the data on Appendix A is presented in two ways. First, a very brief narrative description is provided for each job type. Second, duty, background, and job satisfaction tables are provided so that easy comparisons can be made between the job types in any one cluster. (For further explanation of the job types identified, see the CAREER LADDER STRUCTURE section of this report.)

Ground Radio Maintenance Personnel

There are eight job types in this cluster, and the biggest differentiating factors between these job types appear to be the type of ground radio equipment maintained and the average number of tasks performed. Air Traffic Control Equipment Repairmen perform an average of 164 tasks and are responsible for maintaining the ground radios associated with ground-to-air communications at an air base. These incumbents maintain such radios as the AN/GRC-175, AN/GRC-171, or AN/GRR-24, and appear to be fairly satisfied with their job, with 93 percent perceiving their training is being utilized at least fairly well. Mobile Communications Equipment Repairmen are maintaining the ground radios associated with tactical communications units, such as the AN/MRC-107. These personnel perform an average of 146 tasks and 44 percent are located overseas. Control Tower Equipment Repairmen maintain the same equipment and perform a job very similar to ATC Equipment Repairmen. However, these personnel are about three years junior and only perform about half as many tasks as ATC Equipment Repairment. Technical Control/Radar Facility Radio Repairmen are primarily working at technical control or radar facilities and are maintaining the ground radios associated with those sites. Forty-seven percent of KWT-6/5 Transceiver Repairmen are located overseas, and only 37 percent are in their first enlistment. These incumbents routinely maintain such equipment as the 208U-3, AN/FRC-153, KWM-2/2A, and KWT-6/5. AN/TSC-60(V) Communications Central Repairmen average 72 months TAFMS and 63 percent maintain the AN/TSC-60(V) 1/2. It is interesting to note that only 59 percent of these incumbents find their job interesting but 58 percent plan to reenlist. AN/MRC-107 Repairmen work in tactical communications units or Combat Communications Groups and maintain the mobile ground radios associated with those organizations. It is interesting to note that 80 percent are in their first enlistment and only 38 percent plan to reenlist. Finally, AN/GRA-53/54 Repairmen spend 38 percent of their job time on supervisory duties and perform an average of 60 tasks. These incumbents routinely maintain such radios as the AN/GRC-130 or AN/GRA-53/54, and only 15 percent are stationed overseas. (For more information about these job types, see Tables I, II, and III.)

Aeronautical Station and GIANT TALK Equipment Personnel

There are five job types within this cluster, and there appear to be a number of differentiating factors among these job types. Some of the factors that best distinguish these jobs are the average number of tasks performed, the type of ground radio equipment maintained, and the amount of time spent maintaining transmitters, receivers, or universal radio group (URG) equipment. 208U-3/10 Equipment Repairmen are working at overseas transmitter sites and concentrate on maintaining the 208U-3, 208U-10, and 310V-1. Ninety percent of these personnel hold the 5-skill level, and only 65 percent find their job interesting. Only ten percent of Transmitter Site Shift Supervisors are located overseas, and 30 percent hold the 7-skill level. Ninety percent of these personnel work at a transmitter site, and 90 percent find their job interesting. Ground-to-Air Radio Repairmen maintain the same radios as 208U-3/10 Equipment Repairmen, but only perform half as many tasks and spend slightly more job time maintaining transmitters. Seventy-two percent of these incumbents are in this first enlistment, and 45 percent plan to reenlist. HF Receiver Repairmen are somewhat different in that these incumbents spend 19 percent of their job time maintaining receivers, which is more than the other job types in this cluster. Eighty-six percent of these incumbents work at receiver sites, and these incumbents maintain such equipment as the 651F-1 and R390-A. Finally, SCOPE CONTROL/PANEL Equipment Repairmen spend 20 percent of their job time maintaining SCOPE CONTROL or URG equipment. Sixty-nine percent report working at Control Centers, 54 percent are located overseas, and 43 percent are in their first enlistment. (For more information about these job types see Tables IV, V, and VI.)

Quality Control Personnel

Personnel from the 304X0, 304X4, and 304X6 specialties can be found in the job types in this cluster. The average number of tasks performed, the level assigned, and the type of mission evaluated appear to be the biggest differentiators of the personnel in these job types. Senior Quality Control Personnel appear to be personnel experienced in quality control and are located at a variety of wideband, ground radio, and space communication system locations. These personnel perform an average of 36 tasks, and 62 percent plan to reenlist. Fifty percent of Headquarters Level Quality Control Personnel are working in a headquarters staff position. These respondents are among the most senior, averaging 202 months TAFMS and 89 percent find their job interesting. Junior Quality Control Personnel appear to be personnel who have recently been assigned to a quality control position. They perform a low average number of tasks (13) and only 60 percent find their job interesting. Finally Engineering and Installation Quality Control Personnel are responsible for insuring that the installation or removal of equipment is done correctly. These personnel are relatively junior (average TAFMS of 153 months) and only 40 percent believe their training is utilized at least fairly well. (For more information about these job types see Tables VII, VIII, and IX.)

Firstline Maintenance Supervisors

As with Quality Control Personnel, 304X0, 304X4, and 304X6 personnel can also be found in these three job types. The differentiating factors for the three job types appear to be the type of unit assigned, the average number of tasks performed, and the types of equipment maintained. Ground Radio Firstline Supervisors are working at a number of fixed ground radio locations and roughly divide their time between supervisory and maintenance duties. These incumbents maintain a variety of ground radio equipment, and it is interesting to note that 65 percent plan to reenlist. Wideband Firstline Supervisors are primarily working at fixed wideband communications sites overseas. These personnel also roughly divide their time between supervisory and maintenance duties, and perform an average of 178 tasks. In addition, these incumbents are fairly satisfied, with 62 percent planning to reenlist and 82 percent finding their job interesting. Mobility Firstline Supervisors are primarily 304X6 personnel working at mobile or tactical communications units. These incumbents perform a very high average number of tasks (237) and 53 percent are located overseas. These incumbents are relatively dissatisfied, with only 67 percent finding their job interesting and only 47 percent plan to reenlist. (For more information about these types see Tables X, XI, and XII.)

Radio Maintenance Supervisors

The two job types in this cluster are also made up of 304X0, 304X4, and 304X6 personnel. The average number of tasks performed, the time spent performing supervisory duties, and the average months TAFMS seem to be the biggest discriminators between these two groups. Site Superintendents spend about 90 percent of their job time on supervisory duties, and average 240 months TAFMS. Fifty-eight of these incumbents are located overseas and generally, these incumbents perform more of a management job than the other job type in this cluster. In addition, these incumbents seem to be very satisfied with their job, with 84 percent finding their job interesting and 95 percent perceiving their job utilized their talents at least fairly well. Workcenter Supervisors perform an average of 87 tasks and appear to be the middle level supervisors at a variety of ground radio, wideband, and space communication system workcenters. These incumbents only average 204 months TAFMS, and 78 percent find their job interesting. (For more information about these job types see Tables XIII, XIV, and XV.)

TABLE I
RELATIVE PERCENT TIME SPENT ON DUTIES BY GROUND RADIO MAINTENANCE PERSONNEL JOB TYPES

DUTY	ATC EQUIP REP (GRP1071, N=188)	MOBILE COMM EQUIP REP (GRP1188, N=82)	CONTROL TOWER EQUIP REP (GRP770, N=62)	TECH CONTROL/ RADAR REP (GRP620, N=47)	KWT- 6/5 TRANS REP (GRP700, N=43)	AN/TSC- 60(V) REP (GRP724, N=57)	AN/ARC- 107 RADIO REP (GRP548, N=21)	AN/GR- 53/54 REF (GRP549, N=27)
ORGANIZING AND PLANNING	3	1	1	1	1	2	1	10
DIRECTING AND IMPLEMENTING	3	1	1	2	2	3	2	11
INSPECTING AND EVALUATING	1	1	*	*	1	1	*	8
TRAINING	3	1	*	2	2	3	*	9
PREPARING AND MAINTAINING FORMS, RECORDS AND REPORTS	2	1	1	3	2	3	3	6
PERFORMING SUPPLY FUNCTIONS	2	1	2	4	3	4	7	7
PERFORMING EQUIPMENT OPERATION FUNCTIONS	4	5	7	8	5	9	6	3
PERFORMING SATELLITE OPERATION FUNCTIONS	*	*	*	*	*	*	*	*
PERFORMING GENERAL MAINTENANCE FUNCTIONS	10	11	11	15	14	13	11	8
MAINTAINING ANTENNA SYSTEMS	1	1	*	2	2	2	1	1
MAINTAINING RECEIVERS TO INCLUDE RECEIVE PORTION OF TRANSCIEVERS	16	23	18	16	15	14	19	8
MAINTAINING TRANSMITTERS TO INCLUDE TRANSMITTER PORTION OF TRANSCIEVERS	18	23	23	19	17	16	23	7
MAINTAINING VOICE FREQUENCY MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	*	*	*	*
MAINTAINING TELETYPE MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	*	*	*	*
MAINTAINING COMMUNICATION OR CONTROL CONSOLES	7	*	10	*	3	2	*	1
MAINTAINING AUDIO OR FACSIMILE EQUIPMENT	5	1	5	2	3	*	*	2
MAINTAINING SCOPE CONTROL OR UNIVERSAL RADIO GROUP EQUIPMENT	*	*	*	*	*	*	*	*
MAINTAINING MODEMS	*	*	*	*	*	*	*	*
MAINTAINING TRACKING SYSTEMS	*	*	*	*	*	*	*	*
MAINTAINING BASE AND INSTALLATION SECURITY SYSTEMS	*	*	*	*	*	*	*	*
MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES	14	11	8	9	17	8	7	5
PERFORMING SITE INSTALLATION OR MOVING FUNCTIONS	*	3	*	1	*	4	4	*
PERFORMING SUPPORT FUNCTIONS	3	6	3	6	3	7	10	3

*DENOTES LESS THAN ONE PERCENT

TABLE 11

BACKGROUND INFORMATION FOR GROUND RADIO MAINTENANCE PERSONNEL JOB TYPES

	ATC		MOBILE		CONTROL		TECH		KWT-		AN/TSC-		AN/MRC-		AN/GR-	
	REP	EQUIP	REP	EQUIP	REP	EQUIP	REP	RADAR	TRANS	6/5	60(V)	REP	REP	107	53/54	REP
AVERAGE NUMBER OF TASKS PERFORMED:	164	19.4	146	18.4	82	13.2	57	12.7	12.7	119	15.3	82	12.3	82	60	10.8
JOB DIFFICULTY INDEX:	E-4	E-4	E-4	E-4	E-3/E-4	E-4	E-4	E-4	E-4/E-5	E-4	E-4	E-4	E-4	E-4	E-3/E-4	E-3/E-4
AVERAGE PAYGRADE:	29%	29%	44%	44%	13%	13%	17%	17%	47%	40%	40%	38%	38%	38%	47%	15%
PERCENT LOCATED OVERSEAS:																
DAFSC																
30434	9%	12%	12%	12%	37%	37%	25%	25%	5%	16%	16%	19%	19%	19%	30%	30%
30454	70%	70%	72%	72%	55%	55%	60%	60%	72%	70%	70%	81%	81%	81%	63%	63%
30474	20%	20%	16%	16%	8%	8%	15%	15%	21%	10%	10%	-	-	-	7%	7%
304X0	1%	1%	-	-	-	-	-	-	2%	2%	2%	-	-	-	-	-
304X6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER	-	-	-	-	-	-	-	-	-	2%	2%	-	-	-	-	-
AVERAGE NUMBER OF PERSONNEL SUPERVISED:	1	1	-	-	-	-	-	-	-	-	-	1	1	1	-	-
AVERAGE MONTHS TAFTS:	73	70	70	70	42	42	57	57	79	72	72	52	52	52	44	44
PERCENT IN FIRST ENLISTMENT:	4%	4%	52%	52%	78%	78%	57%	57%	37%	39%	39%	80%	80%	80%	73%	73%
PERCENT MAINTAINING THE FOLLOWING EQUIPMENT:																
208U-3	2%	2%	5%	5%	-	-	2%	2%	33%	35%	35%	-	-	-	4%	4%
208U-10	2%	2%	-	-	-	-	-	-	23%	23%	23%	-	-	-	-	-
618T-1	6%	6%	38%	38%	3%	3%	2%	2%	7%	23%	23%	52%	52%	52%	4%	4%
AN/FRC-153	60%	60%	43%	43%	37%	37%	13%	13%	30%	26%	26%	38%	38%	38%	19%	19%
KWH-2/2A	64%	64%	54%	54%	55%	55%	21%	21%	58%	30%	30%	43%	43%	43%	22%	22%
KWT-6/5	15%	15%	10%	10%	10%	10%	11%	11%	40%	4%	4%	-	-	-	4%	4%
R-390A	36%	36%	23%	23%	40%	40%	4%	4%	42%	12%	12%	14%	14%	14%	4%	4%
AN/GR-53/54	35%	35%	20%	20%	21%	21%	-	-	2%	2%	2%	2%	2%	2%	33%	33%
AN/GRC-171	94%	94%	51%	51%	97%	97%	87%	87%	19%	32%	32%	14%	14%	14%	22%	22%
AN/GRC-175	88%	88%	32%	32%	89%	89%	17%	17%	7%	7%	7%	-	-	-	7%	7%
AN/GRR-23	72%	72%	24%	24%	73%	73%	4%	4%	16%	2%	2%	5%	5%	5%	4%	4%
AN/GRR-24	94%	94%	44%	44%	94%	94%	98%	98%	16%	16%	16%	19%	19%	19%	11%	11%
AN/GRR-25	61%	61%	15%	15%	65%	65%	-	-	5%	2%	2%	-	-	-	-	-
AN/GRT-21	92%	92%	28%	28%	95%	95%	4%	4%	14%	2%	2%	5%	5%	5%	4%	4%
AN/GRT-22	94%	94%	45%	45%	95%	95%	96%	96%	16%	18%	18%	19%	19%	19%	11%	11%
R-1250	30%	30%	7%	7%	37%	37%	2%	2%	2%	2%	2%	-	-	-	-	-
AN/MRC-107	7%	7%	40%	40%	2%	2%	-	-	2%	18%	18%	72%	72%	72%	-	-
AN/TSC-60(V) 1/2	2%	2%	21%	21%	-	-	2%	2%	-	63%	63%	5%	5%	5%	5%	5%
AN/GWC-130	1%	1%	2%	2%	2%	2%	-	-	-	4%	4%	-	-	-	41%	41%

TABLE III

JOB SATISFACTION AND RELATED DATA FOR GROUND RADIO MAINTENANCE PERSONNEL JOB TYPES
(PERCENT MEMBERS RESPONDING)*

	ATC EQUIP REP	MOBILE COMM EQUIP REP	CONTROL TOWER EQUIP REP	TECH CONTROL/ RADAR REP	KWT- 6/5 TRANS REP	AN/TSC- 60(V) REP	AN/MRC- 107 RADIO REP	AN/GRA- 53/54 REP
I FIND MY JOB:								
DULL	5	9	2	19	14	18	10	7
SO-SO	15	20	11	11	14	23	-	15
INTERESTING	80	71	87	68	72	59	90	78
MY JOB UTILIZES MY TALENTS:								
NOT AT ALL TO VERY LITTLE	11	23	8	15	21	26	24	30
FAIRLY WELL OR BETTER	89	75	92	85	79	74	76	70
MY JOB UTILIZES MY TRAINING:								
NOT AT ALL TO VERY LITTLE	7	20	3	17	16	18	38	15
FAIRLY WELL OR BETTER	93	80	95	83	82	82	62	85
I PLAN TO REENLIST:								
NO, PLANNING TO RETIRE	2	-	2	2	5	2	-	-
NO OR PROBABLY NO	44	57	50	53	37	40	62	56
YES OR PROBABLY YES	53	43	46	45	56	58	38	44

*NOTE: TABLES MAY NOT ADD TO 100 PERCENT DUE TO "NO RESPONSE"

TABLE IV

RELATIVE PERCENT TIME SPENT ON DUTIES BY AERONAUTICAL STATION AND GIANT TALK EQUIPMENT PERSONNEL JOB TYPES

DUTY	208U-3/10 EQUIP REP (GRP1120, N=20)	TRANS SITE SHIFT SUPV (GRP1050, N=10)	GROUND- TO-AIR RADIO REP (GRP1398, N=11)	HF RECEIVER REP (GRP487, N=28)	SCOPE CONTROL/ PANEL EQUIP REP (GRP835, N=35)
ORGANIZING AND PLANNING	1	2	1	2	2
DIRECTING AND IMPLEMENTING	2	3	1	3	2
INSPECTING AND EVALUATING	1	*	1	1	1
TRAINING	2	4	*	2	2
PREPARING AND MAINTAINING FORMS, RECORDS, AND REPORTS	2	2	3	2	2
PERFORMING SUPPLY FUNCTIONS	2	3	3	3	2
PERFORMING EQUIPMENT OPERATION FUNCTIONS	6	12	17	8	7
PERFORMING SATELLITE OPERATION FUNCTIONS	*	*	*	*	*
PERFORMING GENERAL MAINTENANCE FUNCTIONS	14	14	19	13	9
MAINTAINING ANTENNA SYSTEMS	3	5	2	2	*
MAINTAINING RECEIVERS TO INCLUDE RECEIVE PORTION OF TRANSCEIVERS	*	*	*	19	9
MAINTAINING TRANSMITTERS TO INCLUDE TRANSMITTER PORTION OF TRANSCEIVERS	23	20	28	1	*
MAINTAINING VOICE FREQUENCY MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	*
MAINTAINING TELETYPE MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*	1
MAINTAINING COMMUNICATION OR CONTROL CONSOLES	*	1	3	*	11
MAINTAINING AUDIO OR FACSIMILE EQUIPMENT	*	-	*	1	4
MAINTAINING SCOPE CONTROL OR UNIVERSAL RADIO GROUP EQUIPMENT	14	1	5	13	20
MAINTAINING MODEMS	*	*	*	*	*
MAINTAINING TRACKING SYSTEMS	*	*	*	*	*
MAINTAINING BASE AND INSTALLATION SECURITY SYSTEMS	*	*	*	*	*
MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES	17	19	7	17	17
PERFORMING SITE INSTALLATION OR MOVING FUNCTIONS	*	*	*	*	*
PERFORMING SUPPORT FUNCTIONS	4	6	4	3	2

*DENOTES LESS THAN ONE PERCENT

TABLE V
BACKGROUND INFORMATION FOR AERONAUTICAL STATION AND GIANT TALK EQUIPMENT PERSONNEL JOB TYPES

	208U-3/10 EQUIP REP	TRANS SITE SHIFT SUPV	GROUND- TO-AIR RADIO REP	HF RECEIVER REP	SCOPE CONTROL/ PANEL EQUIP REP
AVERAGE NUMBER OF TASKS PERFORMED:	112	89	64	102	127
JOB DIFFICULTY INDEX:	15.9	12.6	11.1	15.3	17.9
AVERAGE PAYGRADE:	E-4	E-4/E-5	E-3/E-4	E-4/E-5	E-4
PERCENT LOCATED OVERSEAS:	85%	10%	55%	64%	54%
DAFSC					
30434	5%	10%	18%	7%	6%
30454	90%	60%	73%	64%	71%
30474	5%	30%	9%	29%	17%
304X0	-	-	-	-	3%
304X6	-	-	-	-	3%
OTHER	-	-	-	-	-
AVERAGE NUMBER OF PERSONNEL SUPERVISED:	1	-	-	-	1
AVERAGE MONTHS TAFMS:	58	72	43	83	73
PERCENT IN FIRST ENLISTMENT:	45%	40%	72%	36%	43%
PERCENT MAINTAINING T.E FOLLOWING EQUIPMENT:					
51S-1	20%	-	36%	29%	37%
208U-3	95%	10%	73%	4%	11%
208U-10	100%	10%	82%	4%	17%
310V-1	100%	10%	64%	-	23%
651F-1	-	-	9%	89%	57%
R390-A	45%	40%	9%	32%	31%
PERCENT WORKING IN THE FOLLOWING AREAS:					
CONTROL CENTER (CRC)	10%	-	9%	11%	69%
RECEIVER SITE (FIXED)	-	-	-	86%	49%
TRANSMITTER SITE (FIXED)	95%	90%	100%	-	17%
PERCENT HAVING THE FOLLOWING JOB TITLES:					
CREW CHIEF/SHIFT SUPERVISOR	15%	30%	9%	4%	14%
TECHNICIAN (PRIMARILY MAINTENANCE)	90%	70%	82%	75%	69%

TABLE VI

JOB SATISFACTION AND RELATED DATA FOR AERONAUTICAL STATION AND GIANT TALK EQUIPMENT PERSONNEL JOB TYPES
(PERCENT MEMBERS RESPONDING)

	208U-3/10 EQUIP REP	TRANS SITE SHIFT SUPV	GROUND- TO-AIR RADIO REP	HF RECEIVER REP	SCOPE CONTROL/ PANEL EQUIP REP
<u>I FIND MY JOB:</u>					
DULL	20	10	18	14	3
SO-SO	15	-	9	14	17
INTERESTING	65	90	73	72	70
<u>MY JOB UTILIZES MY TALENTS:</u>					
NOT AT ALL TO VERY LITTLE	20	10	18	14	11
FAIRLY WELL OR BETTER	80	90	82	86	89
<u>MY JOB UTILIZES MY TRAINING:</u>					
NOT AT ALL TO VERY LITTLE	15	20	27	11	17
FAIRLY WELL OR BETTER	85	80	73	89	83
<u>I PLAN TO REENLIST:</u>					
NO, PLANNING TO RETIRE	-	-	-	11	3
NO OR PROBABLY NO	40	40	55	50	32
YES OR PROBABLY YES	60	60	45	39	65

TABLE VII

RELATIVE PERCENT TIME SPENT ON DUTIES BY QUALITY CONTROL
PERSONNEL JOB TYPES

DUTIES	SR QC PERS (GRP510, N=60)	LEVEL QC PERS (GRP513, N=18)	JR QC PERS (GRP289, N=10)	E&I QC PERS (GRP260, N=10)
ORGANIZING AND PLANNING	14	23	9	20
DIRECTING AND IMPLEMENTING	10	15	8	18
INSPECTING AND EVALUATING	31	37	47	7
TRAINING	8	3	4	2
PREPARING AND MAINTAINING FORMS, RECORDS, AND REPORTS	22	12	1	17
PERFORMING SUPPLY FUNCTIONS	2	2	3	18
PERFORMING EQUIPMENT OPERATION FUNCTIONS	2	*	*	2
PERFORMING SATELLITE OPERATION FUNCTIONS	*	*	*	*
PERFORMING GENERAL MAINTENANCE FUNCTIONS	4	*	2	2
MAINTAINING ANTENNA SYSTEMS	*	*	*	*
MAINTAINING RECEIVERS TO INCLUDE RECEIVE PORTION OF TRANSCEIVERS	*	*	*	1
MAINTAINING TRANSMITTERS TO INCLUDE TRANSMIT PORTION OF TRANSCEIVERS	*	*	1	*
MAINTAINING VOICE FREQUENCY MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*
MAINTAINING TELETYPE MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	*	*	*
MAINTAINING COMMUNICATION OR CONTROL CONSOLES	*	*	*	*
MAINTAINING AUDIO OR FACSIMILE EQUIPMENT	*	*	*	*
MAINTAINING SCOPE CONTROL OR UNIVERSAL RADIO GROUP EQUIPMENT	*	*	*	*
MAINTAINING MODEMS	*	*	*	*
MAINTAINING TRACKING SYSTEMS	*	*	*	*
MAINTAINING BASE AND INSTALLATION SECURITY SYSTEMS	*	*	*	*
MAINTAINING COMMON OR MISCELLANEOUS	*	*	*	*
PERFORMING SITE INSTALLATION OR MOVING FUNCTIONS	*	*	1	*
PERFORMING SUPPORT FUNCTIONS	1	*	1	6

*DENOTES LESS THAN ONE PERCENT

TABLE VIII

BACKGROUND INFORMATION FOR QUALITY CONTROL PERSONNEL JOB TYPES

	SR QC PERS	HQ LEVEL QC PERS	JR QC PERS	E&I QC PERS
AVERAGE NUMBER OF TASKS PERFORMED:	36	38	13	43
JOB DIFFICULTY INDEX:	10.5	12.2	9.3	8.8
AVERAGE PAYGRADE:	E-6	E-6/E-7	E-6	E-5/E-6
PERCENT LOCATED OVERSEAS:	30%	28%	20%	50%
<hr/>				
DAFSC				
30430	-	-	-	-
30450	7%	-	-	10%
30470	23%	33%	20%	10%
30434	-	-	-	-
30454	13%	-	10%	60%
30474	50%	61%	70%	20%
30436	-	-	-	-
30456	2%	-	-	-
30476	2%	6%	-	-
OTHER	3%	-	-	-
<hr/>				
AVERAGE NUMBER OF PERSONNEL SUPERVISED:	1	-	-	-
AVERAGE MONTHS TAFMS:	169	202	178	153
PERCENT IN FIRST ENLISTMENT:	5%	-	10%	10%
<hr/>				
PERCENT WORKING IN THE FOLLOWING AREAS:				
E&I UNIT	5%	6%	10%	20%
EVALUATION AND INSPECTION TEAMS	18%	28%	20%	-
HEADQUARTERS STAFF	8%	50%	10%	-
QUALITY CONTROL	75%	28%	70%	10%

TABLE IX

JOB SATISFACTION AND RELATED DATA FOR QUALITY CONTROL PERSONNEL JOB TYPES
(PERCENT MEMBERS RESPONDING)*

	SR QC <u>PERS</u>	HQ LEVEL QC <u>PERS</u>	JR QC <u>PERS</u>	E&I QC <u>PERS</u>
<u>I FIND MY JOB:</u>				
DULL	7	11	-	40
SO-SO	10	-	40	-
INTERESTING	81	89	60	60
<u>MY JOB UTILIZES MY TALENTS:</u>				
NOT AT ALL TO VERY LITTLE	8	17	30	40
FAIRLY WELL OR BETTER	90	83	70	60
<u>MY JOB UTILIZES MY TRAINING:</u>				
NOT AT ALL TO VERY LITTLE	17	22	40	60
FAIRLY WELL OR BETTER	83	78	54	40
<u>I PLAN TO REENLIST:</u>				
NO, PLANNING TO RETIRE	23	33	20	20
NO OR PROBABLY NO	15	22	30	30
YES OR PROBABLY YES	62	45	50	50

*NOTE: PERCENTAGES MAY NOT ADD TO 100 PERCENT DUE TO "NO RESPONSE"

TABLE X

RELATIVE PERCENT TIME SPENT ON DUTIES BY FIRSTLINE MAINTENANCE
SUPERVISORS AND RADIO MAINTENANCE SUPERVISORS JOB TYPES

A13

DUTIES	FIRSTLINE MAINT SUPERVISORS			RADIO MAINT SUPRS		
	GROUND RADIO FIRSTLINE SUPVS (GRP559, N=65)	WIDEBAND FIRSTLINE SUPVS (GRP591, N=49)	MOBILITY FIRSTLINE SUPVS (GRP860, N=13)	SITE SUPTS (GRP871, N=19)	WORKCENTER SUPVS (GRP830, N=130)	
ORGANIZING AND PLANNING	10	6	9	32	19	
DIRECTING AND IMPLEMENTING	11	7	9	24	19	
INSPECTING AND EVALUATING	8	5	8	23	19	
TRAINING	9	8	8	9	13	
PREPARING AND MAINTAINING FORMS, RECORDS, AND REPORTS	6	4	5	6	10	
PERFORMING SUPPLY FUNCTIONS	7	6	5	1	7	
PERFORMING EQUIPMENT OPERATION FUNCTIONS	3	6	6	*	1	
PERFORMING SATELLITE OPERATION FUNCTIONS	*	*	2	*	*	
PERFORMING GENERAL MAINTENANCE FUNCTIONS	8	9	7	*	2	
MAINTAINING ANTENNA SYSTEMS	1	*	3	*	*	
MAINTAINING RECEIVERS TO INCLUDE RECEIVE PORTION OF TRANSCIEVERS	8	11	3	*	*	
MAINTAINING TRANSMITTERS TO INCLUDE TRANSMIT PORTION OF TRANSCIEVERS	7	7	5	*	*	
MAINTAINING VOICE FREQUENCY MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	7	3	*	*	
MAINTAINING TELETYPE MULTIPLEXERS AND ASSOCIATED INTERFACE EQUIPMENT	*	1	1	*	*	
MAINTAINING COMMUNICATION OR CONTROL CONSOLES	1	*	*	*	*	
MAINTAINING AUDIO OR FACSIMILE EQUIPMENT	2	*	*	*	*	
MAINTAINING SCOPE CONTROL OR UNIVERSAL RADIO GROUP EQUIPMENT	*	*	*	*	*	
MAINTAINING MODEMS	*	*	1	*	*	
MAINTAINING TRACKING SYSTEMS	*	*	1	*	*	
MAINTAINING BASE AND INSTALLATION SECURITY SYSTEMS	*	*	1	*	*	
MAINTAINING COMMON OR MISCELLANEOUS SUBASSEMBLIES	5	11	3	*	*	
PERFORMING SITE INSTALLATION OR MOVING FUNCTIONS	*	*	4	*	*	
PERFORMING SUPPORT FUNCTIONS	3	3	6	1	1	

*DENOTES LESS THAN ONE PERCENT

TABLE XI

**BACKGROUND INFORMATION FOR FIRSTLINE MAINTENANCE SUPERVISORS
AND RADIO MAINTENANCE SUPERVISORS JOB TYPES**

	<u>FIRSTLINE MAINT SUPERVISORS</u>			<u>RADIO MAINT SUPERVISORS</u>	
	<u>GRD RADIO FIRST- LINE SUPVS</u>	<u>WIDE- BAND FIRST- LINE SUPVS</u>	<u>MOBILITY FIRST- LINE SUPVS</u>	<u>SITE SUPTS</u>	<u>WORK- CENTER SUPVS</u>
AVERAGE NUMBER OF TASKS PERFORMED:	152	178	237	53	87
JOB DIFFICULTY INDEX:	18.2	20.2	22.9	12.8	11.2
AVERAGE PAYGRADE:	E-6	E-5/E-6	E-5/E-6	E-7	E-6/E-7
PERCENT LOCATED OVERSEAS:	29%	88%	53%	58%	48%
<hr/>					
DAFSC					
30430	-	-	-	-	-
30450	-	45%	-	-	-
30470	-	53%	33%	37%	21%
30434	2%	-	7%	-	-
30454	18%	-	7%	-	3%
30474	80%	2%	-	32%	65%
30436	-	-	-	5%	2%
30456	-	-	33%	5%	2%
30476	-	-	20%	16%	5%
OTHER	-	-	-	5%	2%
<hr/>					
AVERAGE NUMBER OF PERSONNEL SUPERVISED:	4	3	2	6	5
AVERAGE MONTHS TAFMS:	158	139	155	240	204
PERCENT IN FIRST ENLISTMENT:	3%	4%	14%	-	-
<hr/>					
TYPE OF UNIT ASSIGNED:					
MOBILE	3%	4%	13%	11%	7%
FIXED	75%	84%	40%	89%	72%
TACTICAL	22%	4%	40%	-	15%
OTHER	5%	6%	7%	-	7%

TABLE XII

JOB SATISFACTION AND RELATED DATA FOR FIRSTLINE MAINTENANCE SUPERVISORS
AND RADIO MAINTENANCE SUPERVISORS JOB TYPES
(PERCENT MEMBERS RESPONDING)*

	<u>FIRSTLINE MAINT SUPERVISORS</u>			<u>RADIO MAINT SUPERVISORS</u>	
	<u>GRD RADIO FIRST- LINE SUPVS</u>	<u>WIDE- BAND FIRST- LINE SUPVS</u>	<u>MOBILITY FIRST- LINE SUPVS</u>	<u>SITE SUPTS</u>	<u>WORK- CENTER SUPVS</u>
<u>I FIND MY JOB:</u>					
DULL	14	12	13	-	10
SO-SO	9	4	20	16	12
INTERESTING	75	82	67	84	78
<u>MY JOB UTILIZES MY TALENTS:</u>					
NOT AT ALL TO VERY LITTLE	25	10	33	5	17
FAIRLY WELL OR BETTER	75	88	67	95	83
<u>MY JOB UTILIZES MY TRAINING:</u>					
NOT AT ALL TO VERY LITTLE	22	14	13	16	24
FAIRLY WELL OR BETTER	78	84	87	84	76
<u>I PLAN TO REENLIST:</u>					
NO, PLANNING TO RETIRE	14	18	20	32	37
NO OR PROBABLY NO	21	18	33	16	17
YES OR PROBABLY YES	65	62	47	52	46

*NOTE: PERCENTAGES MAY NOT ADD TO 100 PERCENT DUE TO "NO RESPONSE"

APPENDIX B

REPRESENTATIVE TASKS PERFORMED BY GROUND RADIO MAINTENANCE PERSONNEL
(GRP336, N=607)

TASKS	PERCENT MEMBERS PERFORMING
K273 ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	92
K286 ADJUST SQUELCH CIRCUIT COMPONENTS	89
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	88
W836 CLEAN MAINTENANCE WORK AREAS	87
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	86
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICRO- MINIATURE COMPONENTS USING SOLDERING METHODS	85
I206 PERFORM CORROSION CONTROL	84
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	84
K284 ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	83
K291 ALIGN AM RECEIVERS	81
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	80
L409 PERFORM PMIs ON AM UHF TRANSMITTERS OR EXCITERS	80
L359 ALIGN AM UHF TRANSMITTERS OR EXCITERS	79
L355 ADJUST ULTRA HIGH FREQUENCY (UHF) POWER AMPLIFIER COMPONENTS	78
K334 PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMIs) ON AM RECEIVERS	77
K289 ADJUST ULTRA HIGH FREQUENCY (UHF) RECEIVE RF AMPLIFIER COMPONENTS	77
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	74
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	74
L368 ISOLATE MALFUNCTIONS IN AM SOLID STATE UHF TRANSMITTERS OR EXCITERS	73
L404 ISOLATE MALFUNCTIONS IN UHF POWER AMPLIFIERS	73
K303 ISOLATE MALFUNCTIONS IN SOLID STATE AM RECEIVERS	72
L353 ADJUST TRANSMIT GAIN, AUTOMATIC LOAD, OR AUTOMATIC LEVELING CONTROL COMPONENTS	72
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	72
U729 ALIGN TRANSCEIVERS	71
I195 INSPECT SAFETY OF EQUIPMENT	71
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	71
L348 ADJUST HIGH VOLTAGE POWER SUPPLY COMPONENTS	70
K272 ADJUST AMPLITUDE MODULATION (AM) DETECTOR COMPONENTS	69
L354 ADJUST TRANSMITTER OR EXCITER INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	69
I218 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES, SUCH AS MODULES OR PRINTED CIRCUIT BOARDS, USING SOLDERING METHODS	68
F141 PREPARE NONREPARABLE OR REPARABLE ITEMS FOR TURN-IN	67
U692 ADJUST AUDIO AMPLIFIER COMPONENTS	67
K276 ADJUST HF RECEIVE RF AMPLIFIER COMPONENTS	66
I221 REMOVE OR REPLACE MECHANICAL SUBASSEMBLIES	66

REPRESENTATIVE TASKS PERFORMED BY ELECTRONIC SECURITY PERSONNEL
(GRP712, N=61)

TASKS	PERCENT MEMBERS PERFORMING
K291 ALIGN AM RECEIVERS	100
K284 ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	100
K273 ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	97
I206 PERFORM CORROSION CONTROL	95
K334 PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMIs) ON AM RECEIVERS	92
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICROMINIATURE COMPONENTS USING SOLDERING METHODS	92
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	92
W836 CLEAN MAINTENANCE WORK AREAS	90
P552 PERFORM PMIs ON RECORDERS OR REPRODUCERS	90
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	89
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	89
K276 ADJUST HF RECEIVE RF AMPLIFIER COMPONENTS	87
I221 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES, SUCH AS MODULES OR PRINTED CIRCUIT BOARDS, USING SOLDERING METHODS	85
K318 ISOLATE MALFUNCTIONS IN TUBE TYPE AM RECEIVERS	84
P540 ADJUST RECORDER OR REPRODUCER SUBASSEMBLIES OR COMPONENTS	84
U692 ADJUST AUDIO AMPLIFIER COMPONENTS	84
P546 ISOLATE MALFUNCTIONS IN RECORDERS OR REPRODUCERS	82
P547 MECHANICALLY ALIGN RECORDERS OR REPRODUCERS	82
P541 ELECTRICALLY ALIGN RECORDERS OR REPRODUCERS	80
I212 REMOVE OR REPLACE ELECTROMECHANICAL COMPONENTS USING METHODS OTHER THAN SOLDERING	80
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	79
K295 ISOLATE MALFUNCTIONS IN HF TUBE TYPE RECEIVE RF AMPLIFIERS	77
K326 ISOLATE MALFUNCTIONS IN TUBE TYPE RECEIVE IF AMPLIFIERS	77
F142 PREPARE REQUISITIONS FOR PARTS, TOOLS, OR SUPPLIES	77
I213 REMOVE OR REPLACE ELECTROMECHANICAL SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	77
K303 ISOLATE MALFUNCTIONS IN SOLID STATE AM RECEIVERS	77
K277 ADJUST LIMITER COMPONENTS	77
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	75
W853 PAINT EQUIPMENT OR FACILITIES	75
K272 ADJUST AMPLITUDE MODULATION (AM) DETECTOR COMPONENTS	75
W862 SECURE CLASSIFIED MATERIALS	75
K301 ISOLATE MALFUNCTIONS IN SOLID STATE AGCs	74
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	72
E120 MAKE ENTRIES ON MAINTENANCE FORMS	70

REPRESENTATIVE TASKS PERFORMED BY PUBLIC ADDRESS EQUIPMENT REPAIRMEN
(GRP359, N=15)

TASKS	PERCENT MEMBERS PERFORMING
K273 ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	93
P552 PERFORM PMIs ON RECORDERS OR REPRODUCERS	87
P546 ISOLATE MALFUNCTIONS IN RECORDERS OR REPRODUCERS	87
I206 PERFORM CORROSION CONTROL	87
P540 ADJUST RECORDER OR REPRODUCER SUBASSEMBLIES OR COMPONENTS	80
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	80
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	73
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	73
K286 ADJUST SQUELCH CIRCUIT COMPONENTS	73
W836 CLEAN MAINTENANCE WORK AREAS	67
P545 ISOLATE MALFUNCTIONS IN PUBLIC ADDRESS SYSTEMS	67
I195 INSPECT SAFETY OF EQUIPMENT	67
K291 ALIGN AM RECEIVERS	67
K276 ADJUST HF RECEIVE RF AMPLIFIER COMPONENTS	67
O502 ISOLATE MALFUNCTIONS IN ATC CONSOLE LIGHT GUNS	67
P553 SET UP OR REMOVE PUBLIC ADDRESS SYSTEMS	60
P547 MECHANICALLY ALIGN RECORDERS OR REPRODUCERS	60
P551 PERFORM PMIs ON PUBLIC ADDRESS SYSTEMS	60
P541 ELECTRICALLY ALIGN RECORDERS OR REPRODUCERS	60
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	60
K284 ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	60
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICROMINIATURE COMPONENTS USING SOLDERING METHODS	60
K289 ADJUST ULTRA HIGH FREQUENCY (UHF) RECEIVE RF AMPLIFIER COMPONENTS	60
I218 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES, SUCH AS MODULES OR PRINTED CIRCUIT BOARDS, USING SOLDERING METHODS	60
K272 ADJUST AMPLITUDE MODULATION (AM) DETECTOR COMPONENTS	60
O504 ISOLATE MALFUNCTIONS IN ATC CONSOLE TRANSMITTER CONTROL CIRCUITS	60
O503 ISOLATE MALFUNCTIONS IN ATC CONSOLE RECEIVER CONTROL CIRCUITS	60
P539 ADJUST PUBLIC ADDRESS SYSTEM COMPONENTS	53
I207 PERFORM SAFETY INSPECTIONS	53
L409 PERFORM PMIs ON AM UHF TRANSMITTERS OR EXCITERS	53
K293 ALIGN SIDEBAND RECEIVERS	53
O505 ISOLATE MALFUNCTIONS IN ATC CONSOLES	53
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	47
P536 ADJUST FACSIMILE EQUIPMENT COMPONENTS	47
L410 PERFORM PMIs ON AM VHF TRANSMITTERS OR EXCITERS	47

REPRESENTATIVE TASKS PERFORMED BY ENGINEERING AND INSTALLATION PERSONNEL
(GRP264, N=15)

TASKS	PERCENT MEMBERS PERFORMING
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	100
K273 ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	100
I196 INSTALL OR REMOVE MOUNTING HARDWARE	93
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	93
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	93
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICRO- MINIATURE COMPONENTS USING SOLDERING METHODS	93
I224 SPLICE WIRING OR CABLES	80
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	80
O195 INSPECT SAFETY OF EQUIPMENT	80
I192 CRATE OR UNCRATE COMPONENTS OR MODULES	80
K286 ADJUST SQUELCH CIRCUIT COMPONENTS	80
I221 REMOVE OR REPLACE MECHANICAL SUBASSEMBLIES	80
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	80
K284 ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	80
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	80
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	73
I208 PERFORM SYSTEM MODIFICATIONS	73
K290 ADJUST VERY HIGH FREQUENCY (VHF) RECEIVE RF AMPLIFIER COMPONENTS	73
I212 REMOVE OR REPLACE ELECTROMECHANICAL COMPONENTS USING METHODS OTHER THAN SOLDERING	67
U729 ALIGN TRANSCEIVERS	67
I207 PERFORM SAFETY INSPECTIONS	67
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	67
I205 LACE CABLE ASSEMBLIES OR INTERNAL WIRING	67
K276 ADJUST HF RECEIVE RF AMPLIFIER COMPONENTS	67
K278 ADJUST NOISE AMPLIFIER COMPONENTS	60
K293 ALIGN SIDEBAND RECEIVERS	53
K289 ADJUST ULTRA HIGH FREQUENCY (UHF) RECEIVE RF AMPLIFIER COMPONENTS	53
K277 ADJUST LIMITER COMPONENTS	53
W853 PAINT EQUIPMENT OR FACILITIES	53
K272 ADJUST AMPLITUDE MODULATION (AM) DETECTOR COMPONENTS	53
W836 CLEAN MAINTENANCE WORK AREAS	47
I204 ISOLATE MALFUNCTIONS IN SYSTEMS TO SPECIFIC EQUIPMENT	47
V819 INSTALL OR REMOVE COMMUNICATIONS OR CONTROL TOWERS	47
V820 INSTALL OR REMOVE FIXED COMMUNICATION EQUIPMENT	47
I194 FABRICATE SPECIAL COMPONENTS, SUCH AS TEST FIXTURES OR FUNCTION BOXES	47

REPRESENTATIVE TASKS PERFORMED BY AERONAUTICAL STATION AND
GIANT TALK EQUIPMENT PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	88
I206 PERFORM CORROSION CONTROL	87
U689 ADJUST AMPLITUDE OR LINE EQUALIZER COMPONENTS	84
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICRO-MINIATURE COMPONENTS USING SOLDERING METHODS	82
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	81
U712 ADJUST LINE AMPLIFIER COMPONENTS	81
Q574 ISOLATE MALFUNCTIONS IN FSK TELEPHONES	81
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	80
W836 CLEAN MAINTENANCE WORK AREAS	79
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	76
Q556 ADJUST FREQUENCY SHIFT KEYING (FSK) TELEPHONE COMPONENTS	75
Q554 ADJUST ALLOTTER PRESET COMPONENTS	73
Q572 ISOLATE MALFUNCTIONS IN ALLOTTER PRESETS	73
U692 ADJUST AUDIO AMPLIFIER COMPONENTS	72
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	71
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	71
Q563 ADJUST URG DIAL PULSE CONTROL COMPONENTS	70
G155 OBSERVE STATUS DISPLAY PANELS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	69
Q562 ADJUST URG DATA BYPASS EQUIPMENT COMPONENTS	69
I221 REMOVE OR REPLACE MECHANICAL SUBASSEMBLIES	68
Q570 ADJUST URG STATUS DISPLAY READOUT COMPONENTS	68
Q581 ISOLATE MALFUNCTIONS IN URG DIAL PULSE CONTROLS	67
Q555 ADJUST DIALED FREQUENCY REGISTER COMPONENTS	67
I212 REMOVE OR REPLACE ELCTROMECHANICAL COMPONENTS USING METHODS OTHER THAN SOLDERING	65
U801 PERFORM PMIs ON LINE AMPLIFIERS	64
I213 REMOVE OR REPLACE ELECTROMECHANICAL SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	63
Q586 ISOLATE MALFUNCTIONS IN URG REMOTE CONTROL EQUIPMENT	63
E120 MAKE ENTRIES ON MAINTENANCE FORMS	63
Q580 ISOLATE MALFUNCTIONS IN URG DATA BYPASS EQUIPMENT	63
Q588 ISOLATE MALFUNCTIONS IN URG STATUS DISPLAY READOUTS	63
U745 ISOLATE MALFUNCTIONS IN LINE AMPLIFIERS	62
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	60
Q573 ISOLATE MALFUNCTIONS IN DIALED FREQUENCY REGISTERS	60
Q569 ADJUST URG STATUS DISPLAY ENCODER/TRANSMITTER COMPONENTS	60
U749 ISOLATE MALFUNCTIONS IN PATCH PANELS	60

AD-A108 707 AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX F/G 5/1
GROUND RADIO COMMUNICATION SPECIALTY, AFSC 304X4.(U)
NOV 81

UNCLASSIFIED

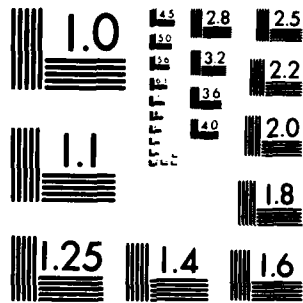
NL

2 2

01/01/82



					END
					DATE
					FILED
					1 82
					OTIC



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963 A

REPRESENTATIVE TASKS PERFORMED BY TITAN RADIO REPAIRMEN
(GRP330, N=11)

TASKS	PERCENT MEMBERS PERFORMING
L342 ADJUST DRIVER, INTERMEDIATE POWER, OR TRANSMIT INTERFACILITY LINE AMPLIFIER COMPONENTS	100
W836 CLEAN MAINTENANCE WORK AREAS	91
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	91
I206 PERFORM CORROSION CONTROL	91
L413 PERFORM PMIs ON FM UHF TRANSMITTERS, EXCITERS, OR UP CONVERTERS	82
F134 MAINTAIN BENCHSTOCKS	82
B46 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	82
L414 PERFORM PMIs ON FM VHF TRANSMITTERS OR EXCITERS	73
U694 ADJUST AUTOMATIC FREQUENCY CONTROL (AFC) COMPONENTS	73
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	73
I218 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES, SUCH AS MODULES OR PRINTED CIRCUIT BOARDS, USING SOLDERING METHODS	73
U693 ADJUST AUTOMATIC FAULT SENSING AND SWITCHING NETWORK COMPONENTS	73
L343 ADJUST DUMMY LOAD COMPONENTS	73
L348 ADJUST HIGH VOLTAGE POWER SUPPLY COMPONENTS	73
L377 ISOLATE MALFUNCTIONS IN EQUIPMENT SAFETY DEVICES, SUCH AS INTERLOCKS	73
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	64
U721 ADJUST SELECTIVE SIGNALING SUBSYSTEM COMPONENTS OTHER THAN ORDERWIRE COMPONENTS	64
L353 ADJUST TRANSMIT GAIN, AUTOMATIC LOAD, OR AUTOMATIC LEVELING CONTROL COMPONENTS	64
L356 ADJUST VERY HIGH FREQUENCY (VHF) POWER AMPLIFIER COMPONENTS	64
L346 ADJUST FM MODULATOR COMPONENTS	64
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	64
L355 ADJUST ULTRA HIGH FREQUENCY (UHF) POWER AMPLIFIER COMPONENTS	64
K284 ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	64
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	64
K292 ALIGN FM RECEIVERS	64
U713 ADJUST LOCAL OSCILLATOR COMPONENTS	64
I195 INSPECT SAFETY OF EQUIPMENT	64
L383 ISOLATE MALFUNCTIONS IN FM TUBE TYPE UHF TRANSMITTERS OR EXCITERS	64
L384 ISOLATE MALFUNCTIONS IN FM TUBE TYPE VHF TRANSMITTERS OR EXCITERS	64
K273 ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	64
L344 ADJUST EQUIPMENT SAFETY DEVICE COMPONENTS, SUCH AS INTERLOCKS	64

REPRESENTATIVE TASKS PERFORMED BY SENIOR RADIO REPAIRMEN
(GRP663, N=38)

TASKS	PERCENT MEMBERS PERFORMING
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	97
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	97
I348 ADJUST HIGH VOLTAGE POWER SUPPLY COMPONENTS	95
K273 ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	95
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICROMINIATURE COMPONENTS USING SOLDERING METHODS	92
K284 ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	92
L346 ADJUST FM MODULATOR COMPONENTS	92
U749 ISOLATE MALFUNCTIONS IN PATCH PANELS	92
K275 ADJUST FREQUENCY MODULATION (FM) DETECTOR OR DISCRIMINATOR COMPONENTS	92
U692 ADJUST AUDIO AMPLIFIER COMPONENTS	92
W836 CLEAN MAINTENANCE WORK AREAS	89
I206 PERFORM CORROSION CONTROL	89
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	89
K292 ALIGN FM RECEIVERS	89
I218 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES, SUCH AS MODULES OR PRINTED CIRCUIT BOARDS, USING SOLDERING METHODS	89
K306 ISOLATE MALFUNCTIONS IN SOLID STATE FM RECEIVERS	89
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	89
I196 INSTALL OR REMOVE MOUNTING HARDWARE	87
K282 ADJUST PRESELECTOR COMPONENTS	87
K285 ADJUST SIDEBAND DEMODULATOR OR BALANCED MIXER COMPONENTS	87
U713 ADJUST LOCAL OSCILLATOR COMPONENTS	87
K277 ADJUST LIMITER COMPONENTS	87
L354 ADJUST TRANSMITTER OR EXCITER INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	87
K305 ISOLATE MALFUNCTIONS IN SOLID STATE FM DETECTORS OR DISCRIMINATORS	87
U717 ADJUST PILOT TONE OSCILLATOR COMPONENTS	87
U694 ADJUST AUTOMATIC FREQUENCY CONTROL (AFC) COMPONENTS	87
U712 ADJUST LINE AMPLIFIER COMPONENTS	87
I221 REMOVE OR REPLACE MECHANICAL SUBASSEMBLIES	87
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	84
K311 ISOLATE MALFUNCTIONS IN SOLID STATE RECEIVE IF AMPLIFIERS	84
M424 ADJUST PILOT TONE AMPLIFIER COMPONENTS	84
K335 PERFORM PMIs ON FM RECEIVERS	84
K301 ISOLATE MALFUNCTIONS IN SOLID STATE AGCs	84
K286 ADJUST SQUELCH CIRCUIT COMPONENTS	84
L350 ADJUST POWER MONITORS	84

**REPRESENTATIVE TASKS PERFORMED BY JUNIOR GROUND RADIO MAINTENANCE PERSONNEL
(GRP257, N=22)**

TASKS	PERCENT MEMBERS PERFORMING
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	95
W836 CLEAN MAINTENANCE WORK AREAS	91
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	91
I206 PERFORM CORROSION CONTROL	77
K273 ADJUST AUTOMATIC GAIN CONTROL (AGC) COMPONENTS	77
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	73
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICROMINIATURE COMPONENTS USING SOLDERING METHODS	73
K286 ADJUST SQUELCH CIRCUIT COMPONENTS	73
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	68
K334 PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON AM RECEIVERS	50
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	50
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	50
K284 ADJUST RECEIVE INTERMEDIATE FREQUENCY (IF) AMPLIFIER COMPONENTS	50
L409 PERFORM PMIs ON AM UHF TRANSMITTERS OR EXCITERS	45
E120 MAKE ENTRIES ON MAINTENANCE FORMS	45
K291 ALIGN AM RECEIVERS	45
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	45
K272 ADJUST AMPLITUDE MODULATION (AM) DETECTOR COMPONENTS	45
I192 CRATE OR UNCRATE COMPONENTS OR MODULES	41
L359 ALIGN AM UHF TRANSMITTERS OR EXCITERS	36
K289 ADJUST ULTRA HIGH FREQUENCY (HF) RECEIVE RF AMPLIFIER COMPONENTS	36
L355 ADJUST ULTRA HIGH FREQUENCY (UHF) POWER AMPLIFIER COMPONENTS	36
F142 PREPARE REQUISITIONS FOR PARTS, TOOLS, OR SUPPLIES	36
K303 ISOLATE MALFUNCTIONS IN SOLID STATE AM RECEIVERS	32
I204 ISOLATE MALFUNCTIONS IN SYSTEMS TO SPECIFIC EQUIPMENT	32
L368 ISOLATE MALFUNCTIONS IN AM SOLID STATE UHF TRANSMITTERS OR EXCITERS	32
I224 SPLICE WIRING OR CABLES	32
D89 CONDUCT OJT	32
W853 PAINT EQUIPMENT OR FACILITIES	27
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	27
K276 ADJUST HF RECEIVE RF AMPLIFIER COMPONENTS	27
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	27
I195 INSPECT SAFETY OF EQUIPMENT	27
I193 DETERMINE CRYSTAL FREQUENCY FOR DESIRED OPERATING FUNCTION BOXES	27
A5 DETERMINE WORK PRIORITIES	27

REPRESENTATIVE TASKS PERFORMED BY COMMUNICATIONS-ELECTRONICS PERSONNEL
(GRP434, N=11)

TASKS	PERCENT MEMBERS PERFORMING
P546 ISOLATE MALFUNCTIONS IN RECORDERS OR REPRODUCERS	100
P540 ADJUST RECORDER OR REPRODUCER SUBASSEMBLIES OR COMPONENTS	100
W836 CLEAN MAINTENANCE WORK AREAS	91
I206 PERFORM CORROSION CONTROL	91
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	91
I196 INSTALL OR REMOVE MOUNTING HARDWARE	91
P547 MECHANICALLY ALIGN RECORDERS OR REPRODUCERS	82
I217 REMOVE OR REPLACE ELECTRONIC MICROMINIATURE COMPONENTS USING SOLDERING METHODS	82
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	82
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICRO- MINIATURE COMPONENTS USING SOLDERING METHODS	82
P541 ELECTRICALLY ALIGN RECORDERS OR REPRODUCERS	82
U692 ADJUST AUDIO AMPLIFIER COMPONENTS	82
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	73
I216 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICRO- MINIATURE COMPONENTS USING METHODS OTHER THAN SOLDERING	73
I224 SPLICE WIRING OR CABLES	73
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	73
I218 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES, SUCH AS MODULES OR PRINTED CIRCUIT BOARDS, USING SOLDERING METHODS	73
I207 PERFORM SAFETY INSPECTIONS	64
I195 INSPECT SAFETY OF EQUIPMENT	64
P552 PERFORM PMIs ON RECORDERS OR REPRODUCERS	64
I208 PERFORM SYSTEM MODIFICATIONS	64
U728 ALIGN SPEAKER SYSTEMS	64
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	64
U755 ISOLATE MALFUNCTIONS IN SOLID STATE AUDIO AMPLIFIERS	64
U770 ISOLATE MALFUNCTIONS IN SPEAKER SYSTEMS	64
P539 ADJUST PUBLIC ADDRESS SYSTEM COMPONENTS	64
P545 ISOLATE MALFUNCTIONS IN PUBLIC ADDRESS SYSTEMS	64
U710 ADJUST GENERAL PURPOSE POWER SUPPLY COMPONENTS	64
F142 PREPARE REQUISITIONS FOR PARTS, TOOLS, OR SUPPLIES	64
G166 RUN TEST TAPES	55
I213 REMOVE OR REPLACE ELECTROMECHANICAL SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	55
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	55
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	55

REPRESENTATIVE TASKS PERFORMED BY QUALITY CONTROL PERSONNEL
(GRP117, N=121)

TASKS	PERCENT MEMBERS PERFORMING
C66 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	82
C64 EVALUATE CAPABILITY OF EQUIPMENT	80
B60 WRITE CORRESPONDENCE	79
C71 EVALUATE INSPECTION REPORTS OR PROCEDURES	76
A24 SCHEDULE INSPECTIONS	69
C68 EVALUATE EQUIPMENT OPERATIONAL, MAINTENANCE, OR REPAIR REPORTS	67
E123 PREPARE EVALUATION REPORTS	66
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	64
E121 PREPARE ACTIVITY REPORTS	58
E113 DISTRIBUTE CORRESPONDENCE, TECHNICAL INFORMATION, OR DIRECTIVES	58
C73 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	56
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	53
E122 PREPARE DEFICIENCY REPORTS	52
B45 INTERPRET POLICIES, DIRECTIVES, PROCEDURES FOR SUBORDINATES	50
E114 MAINTAIN CORRESPONDENCE FILES	49
C75 EVALUATE SAFETY PROGRAMS	47
A9 DRAFT SUPPLEMENTS OR CHANGES TO DIRECTIVES	47
A7 DEVELOP WORK METHODS OR PROCEDURES	45
C65 EVALUATE CAUSES OF MISSION ABORTS OR OPERATIONAL DISCREPANCIES	45
C85 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	45
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	44
E116 MAINTAIN PUBLICATION FILES	42
C74 EVALUATE PROCEDURES FOR STORAGE, INVENTORY, OR INSPECTION OR PROPERTY ITEMS	40
I195 INSPECT SAFETY OF EQUIPMENT	40
E118 MAINTAIN TECHNICAL ORDER (TO) FILES	40
A15 PLAN BRIEFINGS	40
I207 PERFORM SAFETY INSPECTIONS	39
F145 REVIEW TABLE OF ALLOWANCES (TA)	37
D106 EVALUATE TRAINING METHODS OR TECHNIQUES	36
A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	36
E126 PREPARE REQUISITIONS FOR TECHNICAL ORDERS	36
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	36
A5 DETERMINE WORK PRIORITIES	35
C61 ANALYZE WORKLOAD REQUIREMENTS	34
C62 COMPARE PRODUCTION AGAINST PRODUCTION STANDARDS	33

REPRESENTATIVE TASKS PERFORMED BY FIRSTLINE MAINTENANCE SUPERVISORS
(GRP393, N=148)

TASKS	PERCENT MEMBERS PERFORMING
A5 DETERMINE WORK PRIORITIES	95
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	95
D89 CONDUCT OJT	94
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	91
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	91
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	89
B46 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	89
E120 MAKE ENTRIES ON MAINTENANCE FORMS	88
C82 PREPARE APRs	88
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	88
D96 COUNSEL TRAINEES ON TRAINING PROGRESS	88
F142 PREPARE REQUISITIONS FOR PARTS, TOOLS, OR SUPPLIES	87
F141 PREPARE NONREPARABLE OR REPARABLE ITEMS FOR TURN-IN	84
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	84
A19 PLAN WORK ASSIGNMENTS	82
D91 CONDUCT PROFICIENCY TRAINING	82
B45 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	82
A7 DEVELOP WORK METHODS OR PROCEDURES	82
D95 CONDUCT UPGRADE TRAINING	80
D98 DETERMINE OJT TRAINING REQUIREMENTS	79
I195 INSPECT SAFETY OF EQUIPMENT	78
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	78
I207 PERFORM SAFETY INSPECTIONS	78
A12 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	76
A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	76
I206 PERFORM CORROSION CONTROL	76
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICRO- MINIATURE COMPONENTS USING SOLDERING METHODS	76
E115 MAINTAIN HISTORICAL RECORDS	74
A25 SCHEDULE LEAVES OR PASSES	74
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	74
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	74
W836 CLEAN MAINTENANCE WORK AREAS	73
F144 RESEARCH SUPPLY CATALOGS	72
E117 MAINTAIN STATUS BOARDS OR CHARTS	72

REPRESENTATIVE TASKS PERFORMED BY NCOICs, JOB CONTROL
(GRP564, N=41)

TASKS	PERCENT MEMBERS PERFORMING
E117 MAINTAIN STATUS BOARDS OR CHARTS	100
B33 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	95
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	95
A5 DETERMINE WORK PRIORITIES	93
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	88
E120 MAKE ENTRIES ON MAINTENANCE FORMS	83
B45 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	83
C82 PREPARE APRs	83
B60 WRITE CORRESPONDENCE	78
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	76
A15 PLAN BRIEFINGS	73
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	73
B28 COORDINATE CANNIBALIZATION OF EQUIPMENT PARTS WITH APPROPRIATE AGENCIES	73
D89 CONDUCT OJT	68
D91 CONDUCT PROFICIENCY TRAINING	68
E112 COMPILE MAINTENANCE DATA	66
A7 DEVELOP WORK METHODS OR PROCEDURES	66
A25 SCHEDULE LEAVES OR PASSES	66
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	63
E114 MAINTAIN CORRESPONDENCE FILES	63
A12 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	63
E127 PREPARE STATUS REPORTS	61
B30 DIRECT CONTROL OF CLASSIFIED MATERIALS	61
A19 PLAN WORK ASSIGNMENTS	61
B55 SUPERVISE MILITARY PERSONNEL WITH AFS OTHER THAN 304X0, 304X4, OR 304X6	56
B47 MAINTAIN CONTINGENCY PLANS	54
D96 COUNSEL TRAINEES ON TRAINING PROGRESS	54
E116 MAINTAIN PUBLICATION FILES	51
A9 DRAFT SUPPLEMENTS OR CHANGES TO DIRECTIVES	49
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	49
B35 DIRECT MAINTENANCE OF ADMINISTRATIVE, PUBLICATION, OR TECHNICAL ORDER FILES	46
C80 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	46
C68 EVALUATE EQUIPMENT OPERATIONAL, MAINTENANCE, OR REPAIR REPORTS	44
C79 EVALUATE WORK SCHEDULES	41
D98 DETERMINE OJT TRAINING REQUIREMENTS	41

REPRESENTATIVE TASKS PERFORMED BY RADIO MAINTENANCE SUPERVISORS
(GRP650, N=160)

TASKS	PERCENT MEMBERS PERFORMING
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	98
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	96
B45 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	94
C82 PREPARE APRs	94
A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	89
A25 SCHEDULE LEAVES OR PASSES	89
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	89
A5 DETERMINE WORK PRIORITIES	88
A19 PLAN WORK ASSIGNMENTS	87
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	87
A12 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	86
C71 EVALUATE INSPECTION REPORTS OR PROCEDURES	83
A7 DEVELOP WORK METHODS OR PROCEDURES	83
C80 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	79
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	77
E114 MAINTAIN CORRESPONDENCE FILES	77
D96 COUNSEL TRAINEES ON TRAINING PROGRESS	77
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	76
C73 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	75
D87 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	75
D98 DETERMINE OJT TRAINING REQUIREMENTS	74
B35 DIRECT MAINTENANCE OF ADMINISTRATIVE, PUBLICATION, OR TECHNICAL ORDER FILES	74
C66 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	72
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	71
C83 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	71
B44 INITIATE PERSONNEL ACTION REQUESTS	71
B41 IMPLEMENT SAFETY PROGRAMS	70
C68 EVALUATE EQUIPMENT OPERATIONAL, MAINTENANCE, OR REPAIR REPORTS	69
C79 EVALUATE WORK SCHEDULES	69
A10 ESTABLISH EQUIPMENT MAINTENANCE REQUIREMENTS	66
C61 ANALYZE WORKLOAD REQUIREMENTS	66
E117 MAINTAIN STATUS BOARDS OR CHARTS	66
C69 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	66
B33 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	66
C64 EVALUATE CAPABILITY OF EQUIPMENT	65

REPRESENTATIVE TASKS PERFORMED BY RESIDENT TRAINING SUPERVISORS
(GRP711, N=10)

TASKS	PERCENT MEMBERS PERFORMING
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	100
D106 EVALUATE TRAINING METHODS OR TECHNIQUES	100
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	100
C82 PREPARE APRs	100
D88 ASSIGN RESIDENT COURSE INSTRUCTORS	100
D93 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	100
D105 EVALUATE PROGRESS OF STUDENTS	90
D96 COUNSEL TRAINEES ON TRAINING PROGRESS	90
D86 ADMINISTER TESTS	90
A19 PLAN WORK ASSIGNMENTS	90
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	90
A25 SCHEDULE LEAVES OR PASSES	90
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	90
A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	90
D109 SCORE TESTS	80
C66 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	80
A7 DEVELOP WORK METHODS OR PROCEDURES	80
D99 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	70
D108 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	70
D91 CONDUCT PROFICIENCY TRAINING	70
A12 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	70
B45 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	70
C71 EVALUATE INSPECTION REPORTS OR PROCEDURES	70
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	70
D110 WRITE TEST QUESTIONS	60
B52 SUPERVISE CIVILIAN PERSONNEL	60
C84 WRITE CIVILIAN PERFORMANCE RATINGS OR SUPERVISORY APPRAISALS	60
B60 WRITE CORRESPONDENCE	60
E114 MAINTAIN CORRESPONDENCE FILES	60
C83 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	60
D95 CONDUCT UPGRADE TRAINING	60
A15 PLAN BRIEFINGS	60
A5 DETERMINE WORK PRIORITIES	60
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	60
D101 DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	50

REPRESENTATIVE TASKS PERFORMED BY TOOL CRIB SUPERVISORS
(GRP442, N=12)

TASKS	PERCENT MEMBERS PERFORMING
F142 PREPARE REQUISITIONS FOR PARTS, TOOLS, OR SUPPLIES	100
C82 PREPARE APRs	100
A5 DETERMINE WORK PRIORITIES	100
F141 PREPARE NONREPARABLE OR REPARABLE ITEMS FOR TURN-IN	92
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	92
B46 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	83
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	83
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	83
B45 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	75
E115 MAINTAIN HISTORICAL RECORDS	75
E117 MAINTAIN STATUS BOARDS OR CHARTS	75
A19 PLAN WORK ASSIGNMENTS	75
E113 DISTRIBUTE CORRESPONDENCE, TECHNICAL INFORMATION, OR DIRECTIVES	67
B38 DIRECT SUPPLY FUNCTIONS OR TOOL CRIB OPERATIONS	67
F144 RESEARCH SUPPLY CATALOGS	67
F138 MAINTAIN OFFICE SUPPLIES	67
E120 MAKE ENTRIES ON MAINTENANCE FORMS	67
E114 MAINTAIN CORRESPONDENCE FILES	58
F128 COORDINATE EQUIPMENT CALIBRATION WITH PRECISION MEASUREMENT EQUIPMENT LABORATORIES (PMEL)	58
F134 MAINTAIN BENCHSTOCKS	58
B34 DIRECT MAINTENANCE CREW ACTIVITIES	58
B35 DIRECT MAINTENANCE OF ADMINISTRATIVE, PUBLICATION, OR TECHNICAL ORDER FILES	58
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	58
D96 COUNSEL TRAINEES ON TRAINING PROGRESS	58
I207 PERFORM SAFETY INSPECTIONS	58
F145 REVIEW TABLE OF ALLOWANCES (TA)	58
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	58
E112 COMPILE MAINTENANCE DATA	50
B56 SUPERVISE RADIO RELAY EQUIPMENT (WIDEBAND COMMUNICATIONS EQUIPMENT) SPECIALISTS (AFSC 30450)	50
B33 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	50
W848 MAINTAIN TOOL CRIBS	50
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	50
C73 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	50
F139 MAINTAIN PMEL CALIBRATION CHARTS	42
A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	42

REPRESENTATIVE TASKS PERFORMED BY FIXED ENGINEERING AND INSTALLATION PERSONNEL
(GRP154, N=40)

TASKS	PERCENT MEMBERS PERFORMING
V820 INSTALL OR REMOVE FIXED COMMUNICATION EQUIPMENT	88
I196 INSTALL OR REMOVE MOUNTING HARDWARE	72
V808 ASSEMBLE SYSTEMS OR SUBSYSTEMS FROM COMPONENTS PARTS	70
I205 LACE CABLE ASSEMBLIES OR INTERNAL WIRING	67
W836 CLEAN MAINTENANCE WORK AREAS	57
V819 INSTALL OR REMOVE COMMUNICATIONS OR CONTROL TOWERS	50
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	50
I224 SPLICE WIRING OR CABLES	50
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	47
I192 CRATE OR UNCRATE COMPONENTS OR MODULES	45
I215 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICROMINIATURE COMPONENTS USING SOLDERING METHODS	45
V835 VISUALLY INSPECT INSTALLATION AND INTERCONNECTIONS OR INSTALLED EQUIPMENT	38
V810 CONSTRUCT CABLE TROUGHS	38
W853 PAINT EQUIPMENT OR FACILITIES	35
V822 INSTALL OR REMOVE INTERMEDIATE DISTRIBUTION FRAMES (IDF)	35
V824 INSTALL OR REMOVE MAIN DISTRIBUTION FRAMES (MDF)	32
I220 REMOVE OR REPLACE MECHANICAL COMPONENTS	32
I221 REMOVE OR REPLACE MECHANICAL SUBASSEMBLIES	32
I218 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES, SUCH AS MODULES OR PRINTED CIRCUIT BOARDS, USING SOLDERING METHODS	32
I219 REMOVE OR REPLACE ELECTRONIC SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	32
I216 REMOVE OR REPLACE ELECTRONIC COMPONENTS OTHER THAN MICRO- MINIATURE COMPONENTS USING METHODS OTHER THAN SOLDERING	30
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	30
V812 CONSTRUCT INTERCONNECTS	27
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	27
I195 INSPECT SAFETY OR EQUIPMENT	25
I208 PERFORM SYSTEM MODIFICATIONS	25
B46 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	25
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	22
I213 REMOVE OR REPLACE ELECTROMECHANICAL SUBASSEMBLIES USING METHODS OTHER THAN SOLDERING	20
I206 PERFORM CORROSION CONTROL	17
V809 CHECK LAND LINE CONNECTIONS	17
I207 PERFORM SAFETY INSPECTIONS	17
V823 INSTALL OR REMOVE LINE CONDITIONING EQUIPMENT	17
I212 REMOVE OR REPLACE ELECTROMECHANICAL COMPONENTS USING METHODS OTHER THAN SOLDERING	15
I209 POSITION SAFETY EQUIPMENT	15

REPRESENTATIVE TASKS PERFORMED BY RESIDENT TECHNICAL SCHOOL INSTRUCTORS
(GRP243, N=77)

TASKS	PERCENT MEMBERS PERFORMING
D109 SCORE TESTS	100
D93 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	97
D86 ADMINISTER TESTS	95
D105 EVALUATE PROGRESS OF STUDENTS	92
D96 COUNSEL TRAINEES ON TRAINING PROGRESS	79
D110 WRITE TEST QUESTIONS	65
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	61
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	58
D92 CONDUCT REMEDIAL TRAINING	58
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	56
B46 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	48
D106 EVALUATE TRAINING METHODS OR TECHNIQUES	40
D108 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	29
C66 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	25
D101 DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	25
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	25
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	22
D91 CONDUCT PROFICIENCY TRAINING	19
D103 DIRECT OR IMPLEMENT TRAINING PROGRAMS OTHER THAN OJT	18
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	18
B45 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	18
D99 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	17
I195 INSPECT SAFETY OF EQUIPMENT	16
E118 MAINTAIN TECHNICAL ORDER (TO) FILES	13
C64 EVALUATE CAPABILITY OF EQUIPMENT	13
D111 WRITE TRAINING REPORTS	12
E120 MAKE ENTRIES ON MAINTENANCE FORMS	12
B60 WRITE CORRESPONDENCE	12
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	10
A7 DEVELOP WORK METHODS OR PROCEDURES	10
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	10
M427 ALIGN FREQUENCY DIVISION MULTIPLEXERS	10
A15 PLAN BRIEFINGS	10
A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	9
B41 IMPLEMENT SAFETY PROGRAMS	9

REPRESENTATIVE TASKS PERFORMED BY INSTRUCTORS AND MAINTENANCE PERSONNEL
(GRP227, N=19)

TASKS	PERCENT MEMBERS PERFORMING
D105 EVALUATE PROGRESS OF STUDENTS	95
D106 EVALUATE TRAINING METHODS OR TECHNIQUES	95
D86 ADMINISTER TESTS	89
D108 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	89
D92 CONDUCT REMEDIAL TRAINING	89
D96 COUNSEL TRAINEES ON TRAINING PROGRESS	89
D109 SCORE TESTS	89
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	84
D110 WRITE TEST QUESTIONS	84
G165 READ METERS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	84
D93 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	79
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	79
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	79
D91 CONDUCT PROFICIENCY TRAINING	68
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	68
B46 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	68
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	68
B45 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	63
I195 INSPECT SAFETY OF EQUIPMENT	63
G162 PERFORM PREOPERATIONAL CHECKS OF EQUIPMENT	53
D99 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	53
A7 DEVELOP WORK METHODS OR PROCEDURES	53
I207 PERFORM SAFETY INSPECTIONS	53
D111 WRITE TRAINING REPORTS	47
G146 CONFIGURE PATCH PANELS FOR ANALOG OPERATIONS	47
C66 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	42
D89 CONDUCT OJT	42
D94 CONDUCT SPECIAL TRAINING CONFERENCES OR BRIEFINGS	42
C64 EVALUATE CAPABILITY OF EQUIPMENT	42
G155 OBSERVE STATUS DISPLAY PANELS TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	42
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	42
N464 ADJUST FREQUENCY SHIFT CONVERTER COMPONENTS	42
N463 ADJUST FREQUENCY SHIFT KEYS COMPONENTS	42
D95 CONDUCT UPGRADE TRAINING	37
G147 CONFIGURE PATCH PANELS FOR DIGITAL OPERATIONS	37

REPRESENTATIVE TASKS PERFORMED BY JOB CONTROLLERS
(GRP491, N=58)

TASKS	PERCENT MEMBERS PERFORMING
E117 MAINTAIN STATUS BOARDS OR CHARTS	97
A5 DETERMINE WORK PRIORITIES	88
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	86
E112 COMPILE MAINTENANCE DATA	69
E127 PREPARE STATUS REPORTS	53
B28 COORDINATE CANNIBALIZATION OF EQUIPMENT PARTS WITH APPROPRIATE AGENCIES	48
B33 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	41
A15 PLAN BRIEFINGS	40
B34 DIRECT MAINTENANCE CREW ACTIVITIES	31
D89 CONDUCT OJT	31
F130 COORDINATE REPAIR OF EQUIPMENT WITH VENDORS OR OTHER AGENCIES	28
W862 SECURE CLASSIFIED MATERIALS	28
B30 DIRECT CONTROL OF CLASSIFIED MATERIALS	22
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	19
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	17
C82 PREPARE APRs	17
E116 MAINTAIN PUBLICATION FILES	17
B37 DIRECT PREMISSION CHECKOUT OF EQUIPMENT OR MATERIALS	14
W836 CLEAN MAINTENANCE WORK AREAS	14
A24 SCHEDULE INSPECTIONS	14
W852 OPERATE SMALL GOVERNMENT VEHICLES SUCH AS PICKUPS OR PASSENGER VEHICLES	14
E118 MAINTAIN TECHNICAL ORDER (TO) FILES	10
A21 PREPARE MAINTENANCE ACTIVITY SCHEDULES	10
E113 DISTRIBUTE CORRESPONDENCE, TECHNICAL INFORMATION, OR DIRECTIVES	10
D96 COUNSEL TRAINEES ON TRAINING PROGRESS	10
A26 SCHEDULE USE OF EQUIPMENT	9
B55 SUPERVISE MILITARY PERSONNEL WITH AFS OTHER THAN 304X0, 304X4, OR 304X6	9
A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	9
A19 PLAN WORK ASSIGNMENTS	9
C61 ANALYZE WORKLOAD REQUIREMENTS	9
C64 EVALUATE CAPABILITY OF EQUIPMENT	9
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	9
A22 PREPARE MAINTENANCE SCHEDULES	9
G151 ESTABLISH COMMUNICATION USER PRIORITIES	7

REPRESENTATIVE TASKS PERFORMED BY PLANS AND SCHEDULING PERSONNEL
(GRP481, N=14)

TASKS	PERCENT MEMBERS PERFORMING
B60 WRITE CORRESPONDENCE	100
A3 COORDINATE WORK ACTIVITIES WITH OTHER UNITS OR AGENCIES	93
E112 COMPILE MAINTENANCE DATA	93
E113 DISTRIBUTE CORRESPONDENCE, TECHNICAL INFORMATION, OR DIRECTIVES	79
E114 MAINTAIN CORRESPONDENCE FILES	71
A5 DETERMINE WORK PRIORITIES	71
A24 SCHEDULE INSPECTIONS	64
A21 PREPARE MAINTENANCE ACTIVITY SCHEDULES	64
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	64
A26 SCHEDULE USE OF EQUIPMENT	57
E117 MAINTAIN STATUS BOARDS OR CHARTS	57
B33 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS OR CHARTS	57
A22 PREPARE MAINTENANCE SCHEDULES	57
E116 MAINTAIN PUBLICATION FILES	50
A7 DEVELOP WORK METHODS OR PROCEDURES	50
E120 MAKE ENTRIES ON MAINTENANCE FORMS	43
E118 MAINTAIN TECHNICAL ORDER (TO) FILES	36
B35 DIRECT MAINTENANCE OF ADMINISTRATIVE, PUBLICATION, OR TECHNICAL ORDER FILES	36
E127 PREPARE STATUS REPORTS	36
C82 PREPARE APRs	36
D89 CONDUCT OJT	36
B46 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	29
E115 MAINTAIN HISTORICAL RECORDS	29
F130 COORDINATE REPAIR OF EQUIPMENT WITH VENDORS OR OTHER AGENCIES	29
A9 DRAFT SUPPLEMENTS OR CHANGES TO DIRECTIVES	29
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	29
B29 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	29
B28 COORDINATE CANNIBALIZATION OF EQUIPMENT PARTS WITH APPRO- PRIATE AGENCIES	29
B45 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	21
A19 PLAN WORK ASSIGNMENTS	21
A15 PLAN BRIEFINGS	21
C71 EVALUATE INSPECTION REPORTS OR PROCEDURES	21
F138 MAINTAIN OFFICE SUPPLIES	21
C61 ANALYZE WORKLOAD REQUIREMENTS	21

REPRESENTATIVE TASKS PERFORMED BY SUPPLY PERSONNEL
(GRP281, N=10)

TASKS	PERCENT MEMBERS PERFORMING
F134 MAINTAIN BENCHSTOCKS	100
F144 RESEARCH SUPPLY CATALOGS	90
F141 PREPARE NONREPARABLE OR REPARABLE ITEMS FOR TURN-IN	90
F142 PREPARE REQUISITIONS FOR PARTS, TOOLS, OR SUPPLIES	80
B46 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	80
B38 DIRECT SUPPLY FUNCTIONS OR TOOL CRIB OPERATIONS	60
F135 MAINTAIN EQUIPMENT ACCOUNTABILITY RECORDS	60
F139 MAINTAIN PMEL CALIBRATION CHARTS	60
E117 MAINTAIN STATUS BOARDS OR CHARTS	60
F129 COORDINATE LOCAL PURCHASES WITH MAINTENANCE OFFICERS OR BASE SUPPLY	60
F137 MAINTAIN INVENTORY RECORDS	50
F128 COORDINATE EQUIPMENT CALIBRATION WITH PRECISION MEASUREMENT EQUIPMENT LABORATORIES (PMEL)	50
F140 MAINTAIN SPARE PART SUPPLY LEVELS OTHER THAN BENCHSTOCK OR FORWARD SUPPLY POINTS	50
B37 DIRECT PREMISSION CHECKOUT OF EQUIPMENT OR MATERIALS	50
F136 MAINTAIN FORWARD SUPPLY POINTS	40
F138 MAINTAIN OFFICER SUPPLIES	40
E120 MAKE ENTRIES ON MAINTENANCE FORMS	40
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	40
F143 PREPARE SUPPLY DIFFICULTY REPORTS, SUCH AS QUALITY DEFICIENCY REPORTS (QDRs)	40
A5 DETERMINE WORK PRIORITIES	40
F130 COORDINATE REPAIR OF EQUIPMENT WITH VENDORS OR OTHER AGENCIES	40
E112 COMPILE MAINTENANCE DATA	30
I191 CONSTRUCT SHOP CABLES OR TEST PLUGS	30
F131 COORDINATE SHIPPING OR RECEIVING WITH GOVERNMENT CALIBRATION FACILITIES	30
D89 CONDUCT OJT	30
A15 PLAN BRIEFINGS	30
B49 SUPERVISE APPRENTICE GROUND BASE RADIO COMMUNICATIONS SPECIALISTS (AFSC 30434)	20
E118 MAINTAIN TECHNICAL ORDER (TO) FILES	20
F145 REVIEW TABLE OF ALLOWANCES (TA)	20
A4 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	20
G164 PERFORM TURN-ON OR TURN-OFF PROCEDURES	20
A22 PREPARE MAINTENANCE SCHEDULES	20
G156 OBSERVE TEST EQUIPMENT, SUCH AS SCOPES OR SIGNAL ANALYZERS, TO DETERMINE EQUIPMENT OPERATION OR SIGNAL QUALITY	20
A26 SCHEDULE USE OF EQUIPMENT	20
B33 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	20

B21

REPRESENTATIVE TASKS PERFORMED BY LIMITED EXPERIENCE QUALITY CONTROL PERSONNEL
(GRP464, N=10)

TASKS	PERCENT MEMBERS PERFORMING
E188 MAINTAIN TECHNICAL ORDER (TO) FILES	90
E121 PREPARE ACTIVITY REPORTS	90
E126 PREPARE REQUISITIONS FOR TECHNICAL ORDERS	90
A24 SCHEDULE INSPECTIONS	90
E123 PREPARE EVALUATION REPORTS	80
E116 MAINTAIN PUBLICATION FILES	70
A3 COORDINATE WORK ACTIVITIES WITH OTHE UNITS OR AGENCIES	60
C66 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	50
E114 MAINTAIN CORRESPONDENCE FILES	50
E122 PREPARE DEFICIENCY REPORTS	50
B60 WRITE CORRESPONDENCE	50
B35 DIRECT MAINTENANCE OF ADMINISTRATIVE, PUBLICATION, OR TECHNICAL ORDER FILES	40
E125 PREPARE REQUISITIONS FOR PUBLICATIONS	40
E113 DISTRIBUTE CORRESPONDENCE, TECHNICAL INFORMATION, OR DIRECTIVES	40
C71 EVALUATE INSPECTION REPORTS OR PROCEDURES	40
C73 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	40
D107 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	30
D97 DEMONSTRATE HOW TO LOCATE NONTECHNICAL OR TECHNICAL INFORMATION	30
A11 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	30
C83 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	20
C68 EVALUATE EQUIPMENT OPERATIONAL, MAINTENANCE, OR REPAIR REPORTS	20
C64 EVALUATE CAPABILITY OF EQUIPMENT	20
W852 OPERATE SMALL GOVERNMENT VEHICLES, SUCH AS PICKUPS OR PASSENGER VEHICLES	20
A13 ESTABLISH PUBLICATION LIBRARIES	20
W853 PAINT EQUIPMENT OR FACILITIES	10
B55 SUPERVISE MILITARY PERSONNEL WITH AFS OTHER THAN 304X0, 304X4, OR 304X6	10
C75 EVALUATE SAFETY PROGRAMS	10
C65 EVALUATE CAUSES OF MISSION ABORTS OR OPERATIONAL DISCREPANCIES	10
C67 EVALUATE CONTRACT DATA REQUIRMENT LISTINGS (CDRL)	10
I207 PERFORM SAFETY INSPECTIONS	10
W855 PERFORM OPERATOR MAINTENANCE ON HAND OR AUTOMATIC WEAPONS	10
W859 PERFORM SITE SECURITY DUTIES	10
W863 SECURE WEAPONS	10

END

DATE
FILMED

1-82

DTIC